



COMBAT

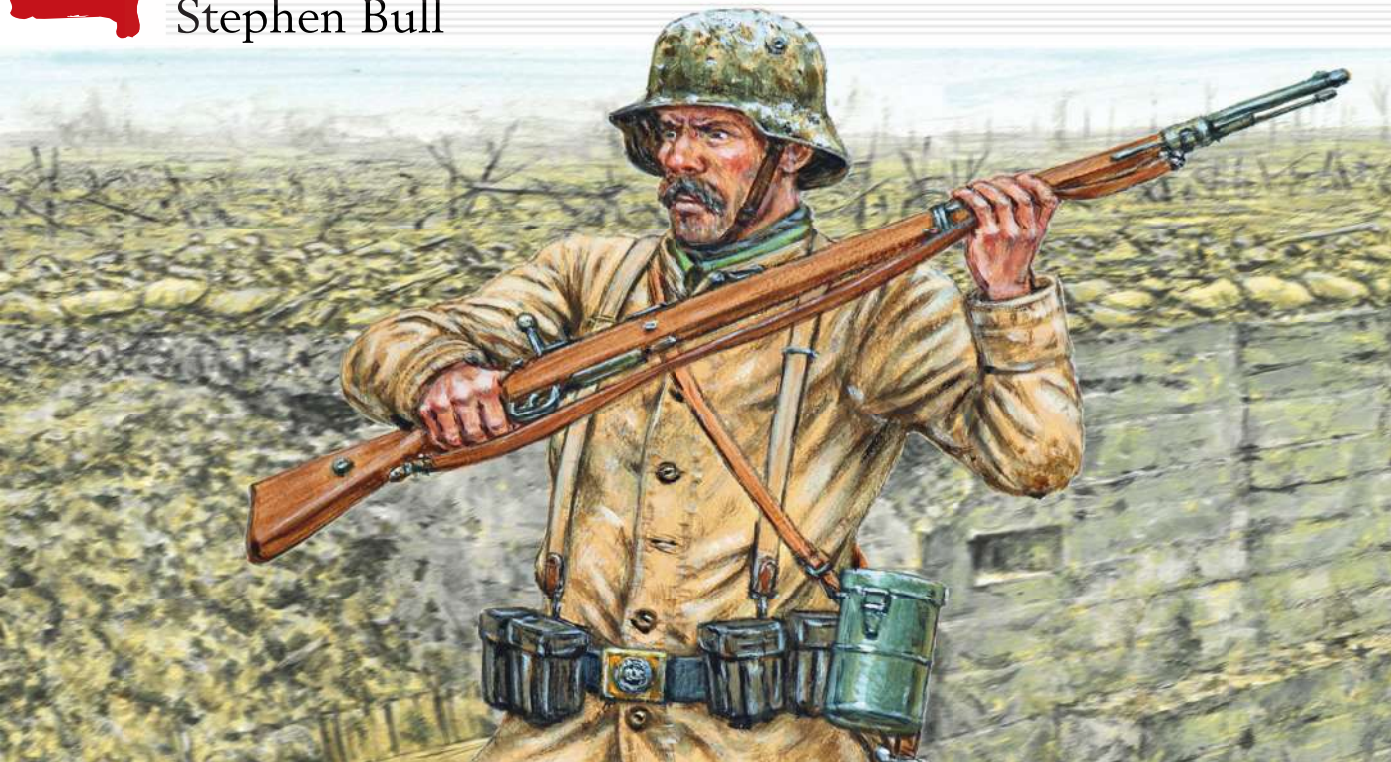
Vimy Ridge to Passchendaele 1917

Canadian Corps Soldier

VERSUS

Royal Bavarian Soldier

Stephen Bull



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Illustrated by Adam Hook

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Introduction

‘Objective reached but am afraid is not fully consolidated. The mud is very bad and our machine guns are filled with mud,’ wrote Capt T.W. MacDowell, OC B Coy, 38th Battalion Canadian Expeditionary Force (CEF), to his commanding officer, Lt-Col C.M. Edwards, at 0800hrs on 9 April 1917. MacDowell would win the Victoria Cross for his conduct during the battle of Vimy Ridge.

I have about 15 men near here and can see others around and am getting them in here slowly ... The runner with your message for ‘A’ Company has just come in and says he cannot find any of the Company officers. I don’t know where my officers or men are but am getting them together. There is not an NCO here. I have one machine gunner but he has lost his cocking piece off the gun and the gun is covered with mud. The men’s rifles are a mass of mud, but they are cleaning them. My two runners and I came to what I had selected previously as my company HQ. We chucked a few bombs down and then came down. The dugout is 75 feet down and is very large. We explored it and sent out 75 prisoners and two officers. This is not exaggerated as I counted them myself. We had to send them out in batches of 12 so they could not see how few we were. I am afraid few of them got back as I caught one of them shooting one of our men after he had given himself up. He did not last long and so am afraid we could not take any back except a few who were good dodgers as the men chased them back with rifle shots ... the ground is almost impassable. Horrible mess. There are lots of dead Bosche and he evidently held well ... The line is obliterated, nothing but shell holes ... Please excuse writing.

The year 1917 saw a series of battlefield encounters leading ultimately to surprising results. Within the framework of World War I they brought to a climax clashes between the fighting men of an ancient kingdom of southern Germany, since 1871 subsumed into the German Empire, and those of a ‘Dominion’ of the British Empire. Neither side initiated this collision, nor



was it necessarily recognized by the troops: Bavarian soldiers often referred indiscriminately to any khaki-clad enemy as 'English' or 'Tommies'. Frequently they were correct, as many Canadian soldiers were British-born. Canadians usually regarded this particular enemy as the Kaiser's Germans first, and, if they made any distinction, Bavarians a poor second. Yet arguably the bloody clashes of the foot soldiers of empires in 1917 helped usher in historic changes far beyond the battlefields of France and Flanders.

Despite extensive fighting against Turks and Bulgarians at Gallipoli, Salonika and in several corners of the Empire, British grand strategy at the end of 1916 remained locked to the fate of France, and to hanging grimly on to the remaining sliver of Belgium. The attritional struggle of the Somme had cost all sides dearly, with Britain taking more of the front from the French as her armies expanded. Victory of a sort was claimed by all protagonists, with heavier losses to Entente forces offset by damage to a German Army which was less able to find reinforcements, and its subsequent withdrawal to the Hindenburg Line. With Russia suffering reverses against Germany in 1916 and Romania invaded, but with France now recovering from the bloodbath of Verdun, it appeared inevitable that Britain and the Canadian Corps would be called upon to attack again.

'Over the top' — Canadians demonstrate their fighting spirit in training. Though greatcoats were not usually worn in the assault, much of the other kit is typical: steel helmets, Short Magazine Lee Enfield (SMLE) rifles with fixed bayonets, Pattern 1908 webbing, and additional ammunition bandoliers.



'Bavarian beer also nurtures heroes': NCOs and men of K.B. 7. Infanterie-Regiment *Prinz Leopold* on a station platform ready for departure to the front, 1915. The regiment was one of the three committed to battle at Fresnoy-en-Gohelle in May 1917.

On the other side of the line such an offensive was already anticipated, though not its location. Preparations were made accordingly, as noted by Chief of the General Staff, Paul von Hindenburg,

Not the least important of these measures were the changes we introduced into our previous system of defence ... In future our defensive positions were no longer to consist of single lines and strong points but a network of lines and groups of strong points. In the deep zones thus formed we did not intend to dispose our troops on a rigid and continuous front but in a complex system of nuclei and distributed in breadth and depth. The defender had to keep his forces mobile to avoid the destructive effects of the enemy fire during the period of artillery preparation, as well as voluntarily to abandon any part of the line which could no longer be held, and then to recover by counter attack all the points that were essential to the whole position. These principles applied in detail as in general. (Hindenburg 2005: 261)

By early 1917 the Canadian and Royal Bavarian contingents had been through much heavy fighting, and garnered good reputations among British and German Imperial forces. Both suffered heavily and gained experience accordingly, though it was the Bavarians who had sacrificed the most. The year would prove crucial in terms of the development of infantry combat in an increasingly grim struggle on the Western Front. The previous year the Somme and Verdun had pushed home hard lessons either side of the line. Where once defensive positions were linear, now there were deep zones. Where trenches once reigned supreme, tacticians were beginning to think in terms of 'resistance nests', 'strong points' and 'webs' to catch and slow enemy advance, with shell holes and bunkers crucial to the scheme. Holding one specific trench to the

Vimy Ridge to Passchendaele, 1917

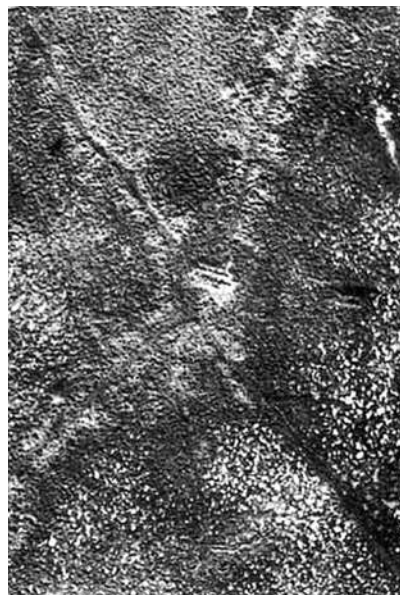
MAP KEY

The campaigns of 1917 would be shaped by Entente planning for a joint Spring Offensive on both Eastern and Western fronts, and by Operation *Alberich*, the German retreat to the Hindenburg Line in March 1917. The forging of the 1917 Spring Offensive began in November 1916, when the French commander-in-chief, Général Joseph Joffre, chaired a conference at Chantilly. Despite the losses in 1916, the Entente Powers in the West maintained superiority in numbers. Joffre's initial plan for the New Year was not only to maintain pressure, but to coordinate major attacks, achieving concentration in time rather than space, over a three-week period, and perhaps as early as February. In the event, Joffre was toppled from active command, tendering his resignation on Christmas Day. Général Robert Nivelle, hero of Verdun, was his practical successor, though with somewhat restricted powers. Nevertheless, Nivelle maintained a grand vision, intending two major French attacks, one north of the River Oise, the other between Soissons and Rheims, coordinating with British efforts on the front between Arras and Bapaume. With success, one of the French assaults could develop into a major breakthrough, the British thereby being able to exploit in Belgium.

Timescale and deployments were rudely upset, however, first by Field Marshal Sir Douglas Haig, Commander-in-Chief of the British Expeditionary Force, who protested resources were inadequate and February far too early, and then by the Germans, whose planned withdrawal to the Hindenburg Line shortened their front. What became known as the 'Nivelle Offensive' crystallized as a highly ambitious attack athwart the Chemin des Dames. In the event Russia proved too weak to contribute, and French attacks ground to a halt in early April. The Canadians, now fielding an entire army corps, were committed to the assault on Vimy Ridge (1) on 9 April, a significant element in the Battle of Arras (9 April–16 May 1917). Attempts to exploit success at Vimy led to the struggle for Fresnoy-en-Gohelle (2), culminating in the recapture of the village by 5. K.B. Division on 8 May. While the Third Battle of Ypres was in progress to the north, the Canadians were used in August to capture Hill 70 near Lens (3). With Third Ypres bogging down into a battle of attrition, the Canadians redeployed from 26 October to take over the attack at Passchendaele (4), one of the most bloody and controversial battles of the modern era.



Passchendaele, an inconsequential village just 165ft above sea level and barely 50ft above surrounding terrain, was the epicentre and ultimate target of two battles within the Third Ypres offensive. These photographs show Passchendaele village from the air, before and after the battle. The outline of the church and shadow of the road system remain visible, but every dot is a waterlogged shell hole.



death with concentrations of troops had given way to progressively lighter trench garrisons, greater numbers of machine guns and more sophisticated methods of counter-attack. Bombardments, blunt instruments in 1915, developed into complex fire plans with an emphasis on timing, surprise, creeping barrages, different types of shell and fuse, and the neutralizing effects of different gases.

The infantry attack also developed to accommodate new conditions. Battalions were now often arranged in depth so that companies were committed one or two at a time, and less as linear waves. The spear-point of the assault might rest on specific platoons or 'shock troops'. Commanders were encouraged to think more in terms of topographic detail providing cover from fire, dead ground and chinks between bombardments, and even attacking into the bombardment rather than regarding artillery as separate from the infantry battle. Attempts were made to cross defensive zones swiftly, sometimes with only very brief bombardments, occasionally with none at all. Attack in darkness, at dawn, or behind smoke was now normal. New weapons and mixes of weapons within platoons were introduced on both sides of the line. Lewis guns, already significant players, were now challenged by the MG 08/15 machine gun and sections were arranged within platoons to field particular weapons or undertake specific tasks. Vickers machine guns, now the province of the Canadian Machine Gun Corps, not only provided machine-gun barrages, but were added back into advances as immediate support to attacking battalions.

Quite obviously 'storm troop' tactics did not appear suddenly in 1918, but were developed gradually in answer to battlefield requirements. Building on earlier experimental units and experience with 'shock' units and raiders, Bavaria's Sturmbataillon Nr. 6 and Sturmbataillon Nr. 15 were actually formed as early as December 1916. Like the other storm battalions they were not merely a small reservoir of assault troops, but means by which to spread the latest knowledge to the bulk of the infantry. Whether either the Bavarian line infantry or the battalions of the CEF were themselves 'ordinary' remains a point of debate; many have suggested both were of elite status.

The Opposing Sides

ORIGINS AND RECRUITMENT

Canadian

Canada made no decision to enter World War I. Instead she was informed by telegraph, that, being part of the British Empire, as of 4 August 1914 she was at war with Germany. Nevertheless, initial reactions were mainly enthusiastic, with the Governor General, HRH Prince Arthur Duke of Connaught, quickly cabling back to London that many would immediately volunteer for active service. This positive news was tempered with the codicil that 'When [the] inevitable fact transpires that a considerable period of training will be necessary before Canadian troops will be fit for European war, this ardour is bound to be dampened somewhat' (Nicholson 1962: 11).



The 48th Highlanders of Canada marching through Toronto before the war. Most of Canada's small pre-war army was comprised of a part-time Militia, taking its traditions and uniforms from British units. The 48th Highlanders were modelled on the Gordon Highlanders. Militia units did not go to Europe, but provided the manpower from which the original Canadian Expeditionary Force was formed. Though fighting battalion strengths dipped from time to time, manpower was sustained by dispatching from Canada 'draft giving battalions'. These supplied replacements, and the number of divisions and battalions in the front line was kept to sustainable proportions.



A Ross Mk III rifle. The .303in rifle with a five-round magazine designed by Sir Charles Ross was adopted by the Canadian Department of Militia and Defence before the war. It was also tested in Britain and found to be an effective target rifle, but unsuitable for active service. In France, Canadian troops confirmed this opinion. The weapon proved sensitive to jamming with mud, and there were accidents. As a result the Ross was replaced with the SMLE. (USNPS Photo, Springfield Armory National Historic Site, SPAR 4784)

The reason for the Governor General's prognostication was simple. While Canadians showed a sense of patriotism typical of the age, and the country had both resisted aggression from her US neighbour and sent men to the Second Anglo-Boer War in the past, hers was fundamentally a non-military society. There were 8 million Canadians, spread over 3.7 million square miles: yet as of March 1914 there was a permanent military establishment of just 3,000. The vast majority of Canadian troops were 'Militia', a part-time force supposed to comprise 5,615 officers and 68,991 NCOs and men, but whose actual strength was somewhat lower. City units performed 16 days' training of which four were in summer camp; rural units conducted 12 days, all of them in camp. The yearly budget for all forces, stores and buildings was less than C\$11 million, of which about 15 per cent was spent on the annual drill. True, Sir Ian Hamilton, Inspector General of Overseas Forces, had recently recommended a reorganization on a 'divisional' basis, and 200 artillery pieces were held in readiness, but virtually all else was lacking. There were not enough uniforms, and the Militia were expected to provide their own boots, shirts and underclothing.

This meant that when Canada went to war, and an offer was made for a force to proceed to Europe, an initial target of just 25,000 men was set for this first contingent of the CEF. The Adjutant General approached Militia units direct for lists of volunteers, aged from 18 to 45, meeting physical requirements, general proficiency, and with a high standard of musketry: reserve officers and men with previous experience could be included. This scheme foundered in confusion, and in a swift about-face the call was readdressed to districts, asking them to supply specified numbers. Districts in turn approached units for quotas, and the men mobilized at Valcartier near Quebec City during late August and September 1914.

CEF battalions varied in constitution, but the 15th Battalion (48th Highlanders of Canada) may be used as a not untypical example. Into a new block of regimental numbers (27001–28500) were dropped approximately 970 volunteers of the Militia from the 48th Highlanders. These were topped up with men of the 97th Algonquin Rifles, the 31st Gray Regiment, and others. Though officially the minimum height was 5ft 3in and the age limit 45, the 48th Highlanders' commanding officer set a more stringent 5ft 8in, and 30 years. On arrival at Valcartier, the troops appeared 'fully equipped with the exception of rifles, knapsacks and bayonets, free of expense. Uniforms were provided by the Regiment' (Beattie 1932: 21). Initial recruitment literature referred to the new body as an 'overseas company' of the 48th, and the regimental crest, Davidson tartan, Glengarry cap and other Highland distinctions were retained. Regimental moustaches were demanded, and in the winter of 1914/15 youngsters made manful, if sometimes unsuccessful, attempts to grow them.

Only with the passage of time, casualties and replacements would the Toronto character of the 15th Bn gradually recede into something more broadly 'Canadian'. At the war's end men who between them had histories with more than 60 different units would be found in the ranks of the 15th Bn. A key exception to this sort of recruitment pattern was the battalion raised by Capt Hamilton Gault, a Montreal veteran of the Second Anglo-Boer War, who neatly sidestepped procedure, offering to raise a unit of ex-soldiers and to contribute to its cost. This unit, Princess Patricia's Light Infantry, landed in France on 21 December 1914, eight weeks before 1st Canadian Division was committed.

As the war evolved, so did Canada's contribution. By late 1916 Canada had 100,000 men in four divisions in the field and voluntary recruitment trailed off. In November 1916 the controversial and ambitious Minister of Militia and Defence, Sam Hughes, was finally jettisoned amid recriminations for his eccentric equipment policies, his efforts to establish a separate Canadian military command structure, and his dangerously impolitic stance on French matters. In late October 1917, Canada followed Britain in introducing conscription, but the Military Service Act met with a very mixed reception, and was opposed by many French Canadians. In the event about 100,000 men were conscripted, but of these barely half would make it overseas before the end of the war.

The average Canadian recruit was of better physical stock than his British or German counterpart: the proportion of men working on the land in farming, hunting and forestry was significant. The impact of this was not as great as might be expected, however, for recruitment was most successful in cities. Moreover, many recruits – and a majority of the first 30,000 – were born in Britain: Fred Bagnall, referring to the 14th Battalion (Royal Montreal Regiment), recalled that the first three companies of his unit maintained affiliations with different parts of the UK (Bagnall 2005: 15). Attempts were made to convince the 14th Bn to don the kilt, so completing a 'Highland Brigade', but with the 14th Bn being 'grenadiers', 'riflemen' and French Canadian infantry, they adhered steadfastly to trousers. British predominance persisted among the fighting battalions in France. For example, almost half of the 58th Battalion, which crossed to Europe in November 1915, was still composed of Englishmen, with a good number of others of Irish, Scottish and Welsh birth. Some were from other parts of the Empire, and there were 16 Americans. Just a third of the men were Canadian-born, and many of these had British parents or grandparents.



Pte Donald McKinnon, 73rd Battalion (Royal Highlanders of Canada), on the Somme, 1916. The Canadians were heavily committed at Flers–Courcellette, Thiepval and the Ancre Heights, suffering 24,000 casualties killed, wounded or missing. The 73rd Bn was disbanded to provide reinforcements after Vimy Ridge.

Bavarian

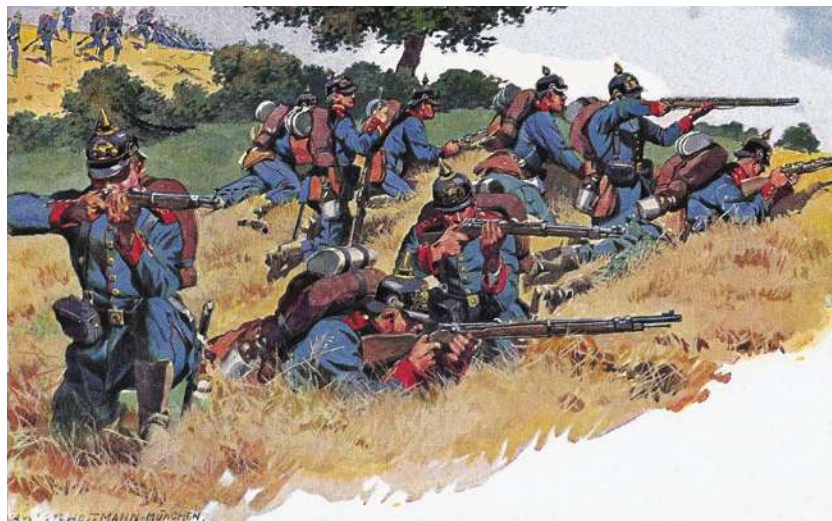
Unlike Canada, Bavaria had many centuries of martial tradition, and an established system of conscription. Under recent Imperial law the kingdom was bound to provide 11 per cent of the manpower of the German Army, a figure proportionate to her population. As with troops of the other German states, men were liable for service first in the *Stehendes Heer* (standing army), before passing into the Reserve, the *Landwehr* and finally the *Landsturm* (see Bull 2014: 12–13).

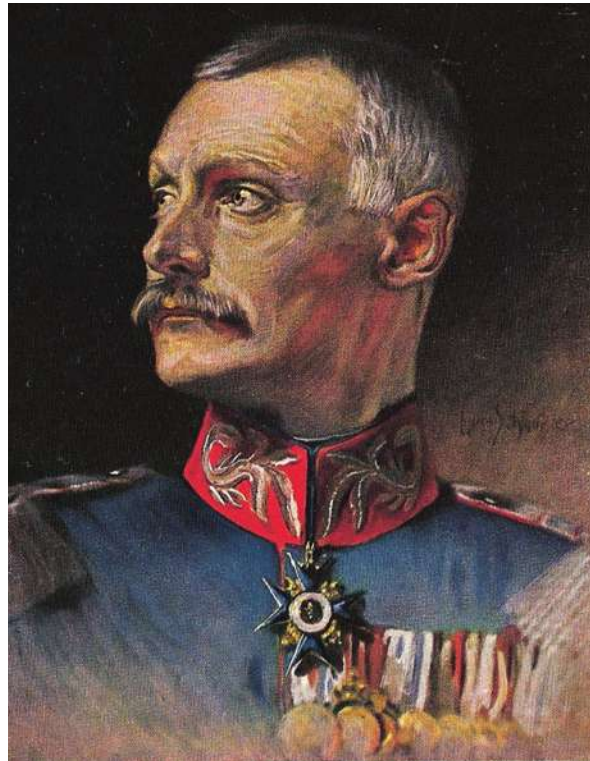
Bavaria was not only a kingdom with its own War Ministry in 1914, but its troops were still referred to as the ‘Royal Bavarian Army’. It numbered its regiments in a separate sequence, and boasted an *Infanterie-Leib-Regiment* (infantry bodyguard regiment). Its infantry regiments possessed distinctive *Fahnen*, or colours, bearing the arms of Bavaria and bore honour titles of significance to Bavarian history. The peacetime army was organized in six consecutively numbered divisions, based at Munich, Augsburg, Landau, Würzburg, Nuremberg and Regensburg, with brigade and regimental headquarters in these and surrounding localities. This strength more than doubled in war with the embodiment of the Reserve and the addition of *Ersatz* or supplementary units and the *Landwehr*. A total of 23 Bavarian divisions were raised by the end of the war, plus the *Alpenkorps*, which was largely Bavarian in composition.

The Bavarian Army had an effective strength of 87,214 all ranks in July 1914, but while units on home soil remained under control of the Bavarian War Ministry, supreme command of the Bavarian field army passed to the Kaiser. The force was initially bolstered by the addition of two divisions recruited in Western Germany, and fought in the ‘Battle of the Frontiers’ in 1914 as 6. Armee under Crown Prince Rupprecht. Though subsequently 6. Armee continued to exist and Rupprecht was promoted to *Generalfeldmarschall*, his command ceased to be essentially Bavarian, and Bavarian divisions now fought alongside formations from all parts of the German Empire.

Pre-war recruit quality was high, being maintained at least in part because only a proportion of eligible men were taken for the Army after the yearly

An artist's impression of Bavarian infantry skirmishing, from a postcard sent in 1907. The traditional light-blue uniform with red collar and cuffs was worn with the *Pickelhaube* helmet from 1872, and though superseded on campaign by the new field grey, was still to be seen at home and in garrisons at the beginning of World War I.





mustering at which they were medically examined and documented. In wartime, expansion of the Army by embodiment of the Reserve and Landwehr regiments mopped up previous years' harvests of trained men, and soon the pool of Landsturm personnel was being dipped into. Volunteers, who initially came forward in large numbers, began to dry up, and though the majority maintained good levels of commitment the sky-high morale and the 'spirit of 1914' was gradually blunted by the lengthening conflict. Allied blockade put pressure on the supply of materials and food, though arguably rural Bavaria was better placed than major industrial areas to face hardship.

TRAINING, WEAPONS AND TACTICS

Canadian

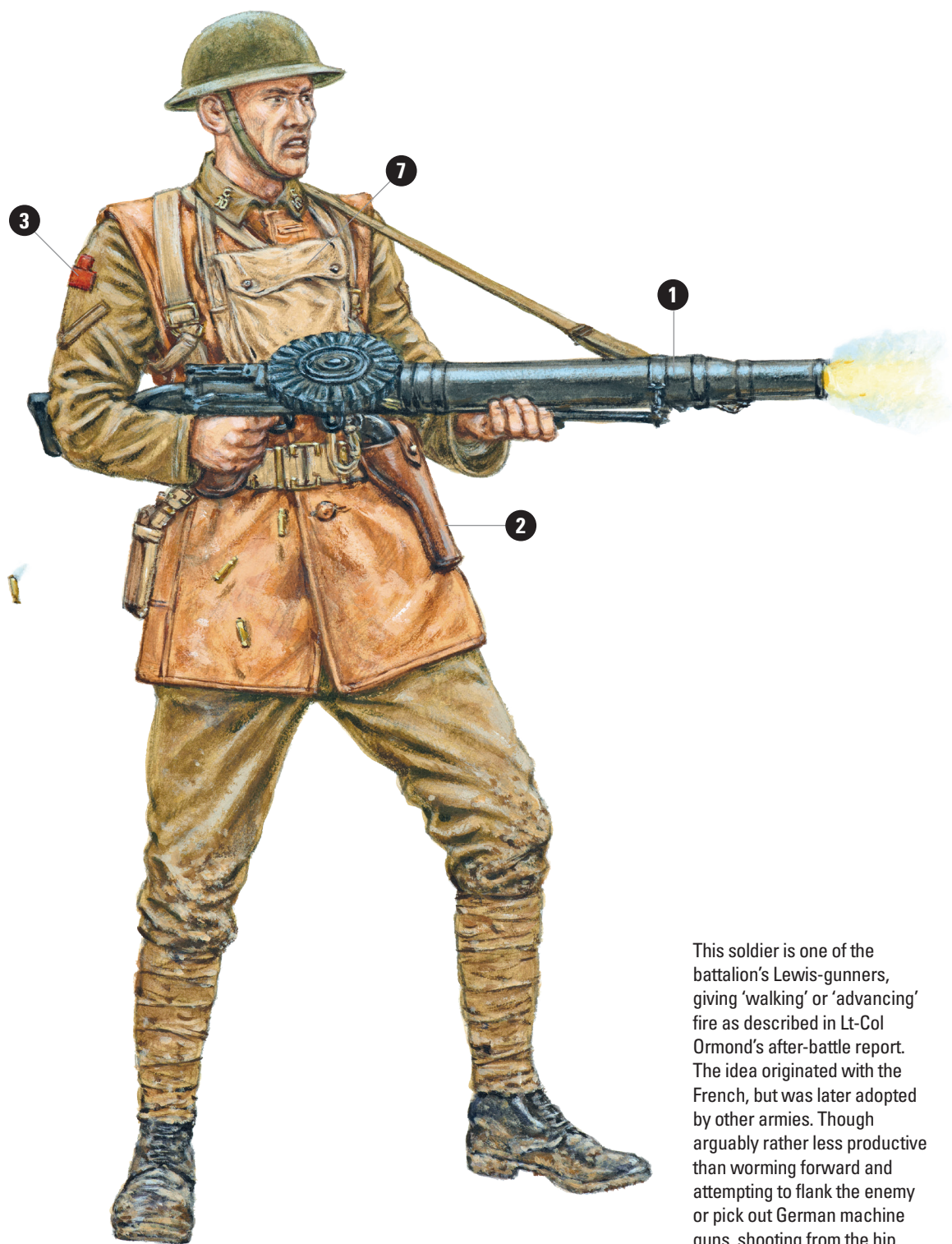
If Canada was unmilitary in character, many battalions boasted men with service experience. In the 58th Bn this was just over half the initial total, and while much of this service was with the Militia, 103 men had served with Imperial forces, or the Territorials in the UK. Yet this was not the same as Western Front combat experience. Much depended on how quickly and effectively Militiamen – and later a larger number of civilians – could be trained. During instruction in Canada, lack of willingness rarely appears to have been a problem – but finding enough instructors, and, crucially, enough instructors with recent practical experience, often was. At the outset the total Canadian 'instructional staff' numbered just 80 (Nicholson 1962: 24).

ABOVE LEFT

The dress and field uniforms of K.B. 22. Infanterie-Regiment *Fürst Wilhelm von Hohenzollern* as depicted in about 1916. Founded at Zweibrücken in 1896, the regiment fought in the West, the East, Serbia and Romania before deployment to Flanders in 1917.

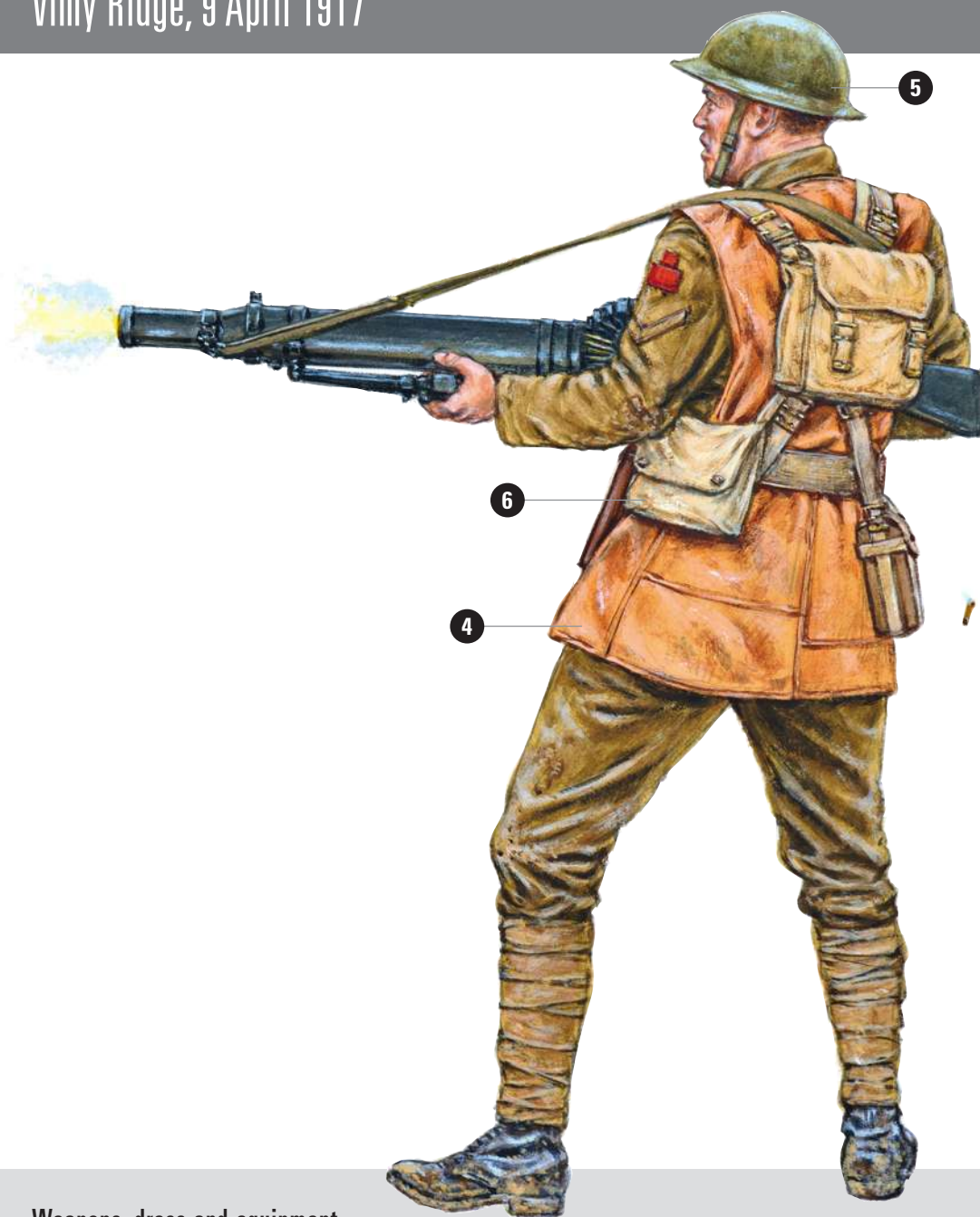
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Rupprecht began his military career as a *Leutnant* in the K.B. Infanterie-Leib-Regiment, rising rapidly to command K.B. I. Armeekorps by 1906, and being promoted full *General der Infanterie* in 1913. The same year, as the eldest son of Ludwig III, he became crown prince of Bavaria. An able commander leading 6. Armee in the West in 1914, from 1916 he led *Heeresgruppe Kronprinz Rupprecht von Bayern* as a *Generalfeldmarschall*. The events of 1917 convinced him the war could not be won.



This soldier is one of the battalion's Lewis-gunners, giving 'walking' or 'advancing' fire as described in Lt-Col Ormond's after-battle report. The idea originated with the French, but was later adopted by other armies. Though arguably rather less productive than worming forward and attempting to flank the enemy or pick out German machine guns, shooting from the hip was a morale-raiser useful for providing suppressive fire.

Vimy Ridge, 9 April 1917



Weapons, dress and equipment

The .303in Lewis gun (1) weighed 28lb and fed from a 47-round pan, and is here supported by a sling. He has an issue .455in six-shot revolver (2) as secondary weapon.

This soldier's khaki serge Service Dress is of standard British type with five buttons, the Canadian seven-button version being abandoned before front-line service began. Note the distinguishing arm patches (3) which are unique to the 10th Bn; the colour of the larger oblong changed with division (here red for 1st Canadian Division), and the shape and colour of the upper portion denoted brigade and battalion. Over the jacket a leather jerkin (4) is worn

against the cold. The steel helmet (5) was a personal issue to all troops at the front by this date.

This man wears parts of the standard Pattern 1908 webbing arranged to suit his role as a Lewis-gunner, dispensing with ammunition pouches, bayonet and entrenching tool, but retaining the water bottle. The remainder of his team will concentrate on carrying ammunition and have rifles for personal protection. In accordance with orders, both a gas helmet (6) and the more up-to-date Small Box Respirator (7) are carried. The total weight including the uniform exceeds 80lb.

Nicknamed the 'potato digger', the US-made Colt-Browning Model 1895 machine gun was used by Canadian forces and the British Yeomanry in .303in calibre, and saw service in the Second Anglo-Boer War. Air-cooled, gas-operated and belt-fed, it had a cyclic rate of approximately 450 rounds per minute. The mechanism and barrel unit, shown here, was mounted on a tripod or carriage in action. The original issue machine gun of Canadian forces in World War I, it was later replaced by the Vickers, though some remained on the battlefield as late as 1917, notably with the 10th Bn at Vimy. (USNPS Photo, Springfield Armory National Historic Site, SPAR 2954)



At Valcartier the recruits built rifle ranges and undertook 50-round 'classifications', fired with the Canadian Ross rifle. There were route marches and intensive 'square bashing' as equipment was issued or manufactured. Weaponry posed specific problems, for though the Ross rifle factory, working at capacity, managed to provide the vast majority of troops with the Ross Mk III rifle, the supply of machine guns remained problematic. Four old Maxims were obtained, and supplemented with the American Colt, the latest Vickers model being unobtainable for some time. A particularly novel idea was the purchase of 'MacAdam Shovels', bought in Philadelphia at C\$1.35 apiece and shipped to the UK. These were intended as both entrenching tool and shield, being stuck into the ground with the soldier shooting through one aperture and sighting through the other. The MacAdam soon proved ineffective for both excavation and protection, and was sold as scrap. The Canadian-manufactured boot was found wanting, and was replaced in Britain with 'a service pair of Imperial pattern' (Nicholson 1962: 27). Some battalions had personal equipment before leaving Canada, usually the old Oliver type, uncomfortable and lacking sufficient ammunition-carrying capacity. This too was discarded and replaced with the War Office-approved Pattern 1908. The changes were interpreted as a snub by the Minister of Militia, and the boot question led to a court of inquiry, but the substitutions improved the lot of the Canadian serviceman.

On reaching Britain the Canadians quickly moved to the time-honoured military testing ground of Salisbury Plain. Here, as Sir Max Aitken put it, in the mud, cold and rain 'they worked and lived and displayed that spirit of endurance, courage and willingness which has since proclaimed them to the world as troops of the finest quality' (Aitken 1916: 9–10). This may have been broadly true, but there were some grumbles. As Pte Herbert McBride of the 21st Battalion (Eastern Ontario) explained:

there was one thing about which we had a real grievance and that was the food. The time we spent in England was the only period during my Canadian service when we did not have plenty of good food. In Canada, and later in France and Flanders, we had an abundance and of the best quality, but in England we had to put up with what the people there were accustomed to. It was pretty tough but some of us managed to get money from home and used it to supplement the meagre fare. You see, the United States and Canada – and possibly other British



A Mk I Lewis gun. Ideally, men were matched by aptitude to their role in battle, as Maj Wilfrid Mavor of the 15th Bn explained: 'a baseball player is put in the bombing section; he may be able to throw bombs pretty well. If he has been some sort of machinist at some time, he is placed in the ... Lewis gun section, as he will be more adept in fixing stoppages and that sort of thing in the Lewis gun. Then you put the husky fellows ... and fellows that are good shots in the rifle section. You put all the boobs in the rifle grenade section. The reason for that, I think is that we do not yet know the full value of the rifle grenade' (quoted in Cane 2004: 63). (USNPS Photo, Springfield Armory National Historic Site, SPAR 5)



Colonies— have a standard of living that is undreamed of in Europe. We are just spoiled, that's all. (McBride 1987: 32)

At Valcartier the men had been assigned to battalions according to their place of origin, and later reshuffled to produce four 'provisional' infantry brigades. These battalions were again reorganized in the UK, many being dissolved into 'reserve' battalions before being recast anew. The old eight-company system was abandoned and the four-company battalion adopted. Moreover, subsequent waves of Canadians were no longer gathered at Valcartier, but undertook basic training in their own localities before moving to the UK. Through 1915 and 1916, training in the UK gradually came closer to the reality of war and new weaponry.

A subject initially foreign to most Canadian recruits was the grenade. One of many officers to undertake the grenade course at the 'Canadian Military School', Shorncliffe, in 1916, was Lt Clifford A. Wells:

This is a four weeks' course. We have lectures every day in regard to the construction and use of the various kinds of bombs or grenades, and then practice throwing bombs by hand and by means of catapults, spring guns, etc, which throw them 200 yards or more. I have been throwing pretty well this week. In practice we use dummy bombs of the same size and weight as the real ones. There are thirteen officers taking the course ... (Wallace 1917: 70)

Interestingly, the course was marked with a certificate for successful candidates: 10 per cent for the production of a suitable notebook, 10 per cent for throwing, and a massive 80 per cent for a written exam. This was doubtless because 'bombing officers' were not really intended to be the best throwers, but they were expected to know a good deal about the subject and to teach theory and practice to others.

For service in France not only was kit improved, and many items brought into line with British standards, but superfluous pieces were jettisoned, with officer's baggage for example being limited to 35lb. Nevertheless, there was

Canadian grenade training: all troops were expected to have at least basic proficiency and there was such a reliance on the 'bomb' in trench warfare that by 1917 the High Command was concerned that rifle and bayonet were being neglected. The thrower's grenade appears to be a Mills type, his headgear an informal woollen hat, suitable for practice in confined spaces in cool weather. Clifford Wells wrote: 'The bombing course is extremely interesting – much more than the machine gun course would be to me. I throw bombs with the same overhead movement of the arm that I used in serving a tennis ball. This enables me to throw accurately, and I have no trouble in throwing the distance necessary in the daily competitions which we have at the school. The bombs must be thrown with a stiff arm, much like bowling a cricket ball, as they are too heavy to throw like a base ball. I should think a lacrosse stick would be excellent for throwing them, but I suppose there is not room in the trenches' (Wallace 1917: 73).



A Canadian sniping and intelligence team, c.1916. Sniping and intelligence-gathering were linked, snipers working under direction of the battalion's intelligence officer, who may well be the officer seen at the centre of the group. At least two types of sniping rifle are evident here, including the SMLE with offset 'scope'. A sergeant wears the *fleur-de-lis* arm badge of the qualified scout, and most sport a Canadian formation sign on the upper arm denoting division, brigade and battalion.

plenty to carry in 'full marching order', the historian of the 15th Bn describing the other ranks' impedimenta on embarkation as 'Drawers, undershirt, shirt, two towels, hold all, shaving kit, balaclava, three pairs socks, house wife [clothing repair kit], great coat, rubber sheet, mess tin and haversack. Add a rifle and 150 rounds and you have upwards of 80 lb' (Beattie 1932: 34). Part of this was omitted in battle, but conversely items such as the respirator and steel helmet were added, as were specific extras for different waves of attacks and men armed with support weapons.

The most significant recent change to infantry training and tactics came with the advent of the new manual SS 135 *Instructions for the Training of Divisions* (War Office 1917b), and its elaboration SS 143, *Instructions for the Training of Platoons for Offensive Action* (War Office 1917a), published in February 1917. Under these regulations the platoon was made up of four sections, each with its own specialism: bombers, Lewis-gunners, riflemen and rifle-bombers. This created a balanced, self-sufficient fighting body, capable of acting as a spearhead of attack or ready to exploit advantage by means of the characteristics of the different types of weapon. According to Sgt Robert Clements of the 25th Battalion (Nova Scotia Rifles):

The storybook idea of going forward into battle under one great surge of emotion with a cry of death or glory ringing in their ears was just so much baloney. The newer recruits were under more strain. They could not be sure how they would react when facing their first severe test. The older vets who had been through this sort of thing several times before mostly looked upon it as just one more dirty job. (Clements 2013: 179)

Bavarian

As in Prussia, recruit training was tough, as recalled by Gustav Ebelshauser, inducted into K.B. 17. Infanterie-Regiment *Orff* at Germersheim in September 1915:

It was a matter of routine to pass the first hour on the training ground in mass formation drills. Miles and miles were covered in criss-crossing, marching back and forth, running, turning, forward, backward, sideways. The whole show came to a finish with the famous goose-step parade. By that time every inch of the vast place had been tramped upon. Legs and feet were played out before the real test of group and individual exercises had even begun. A few men had already dropped from the ranks and were dismissed. Their feet were badly swollen from ill fitting boots ... (Ebelshauser 1984: 29–30)

As the conflict wore on, infantry training raced to keep up both with losses and the new realities of the battlefield, of which marching and rifle drill were now only a part. As early as 1915 Bavarian and other German units had begun to experiment with 'shock' units and the integration of other weapons into the infantry. In May 1916 High Command decreed that all armies on the Western Front should send small cadres of officers and NCOs to new *Sturmabteilungen* to begin the process of spreading the latest knowledge and form new *Sturmabteilungen* or 'storm detachments'. By the end of the year

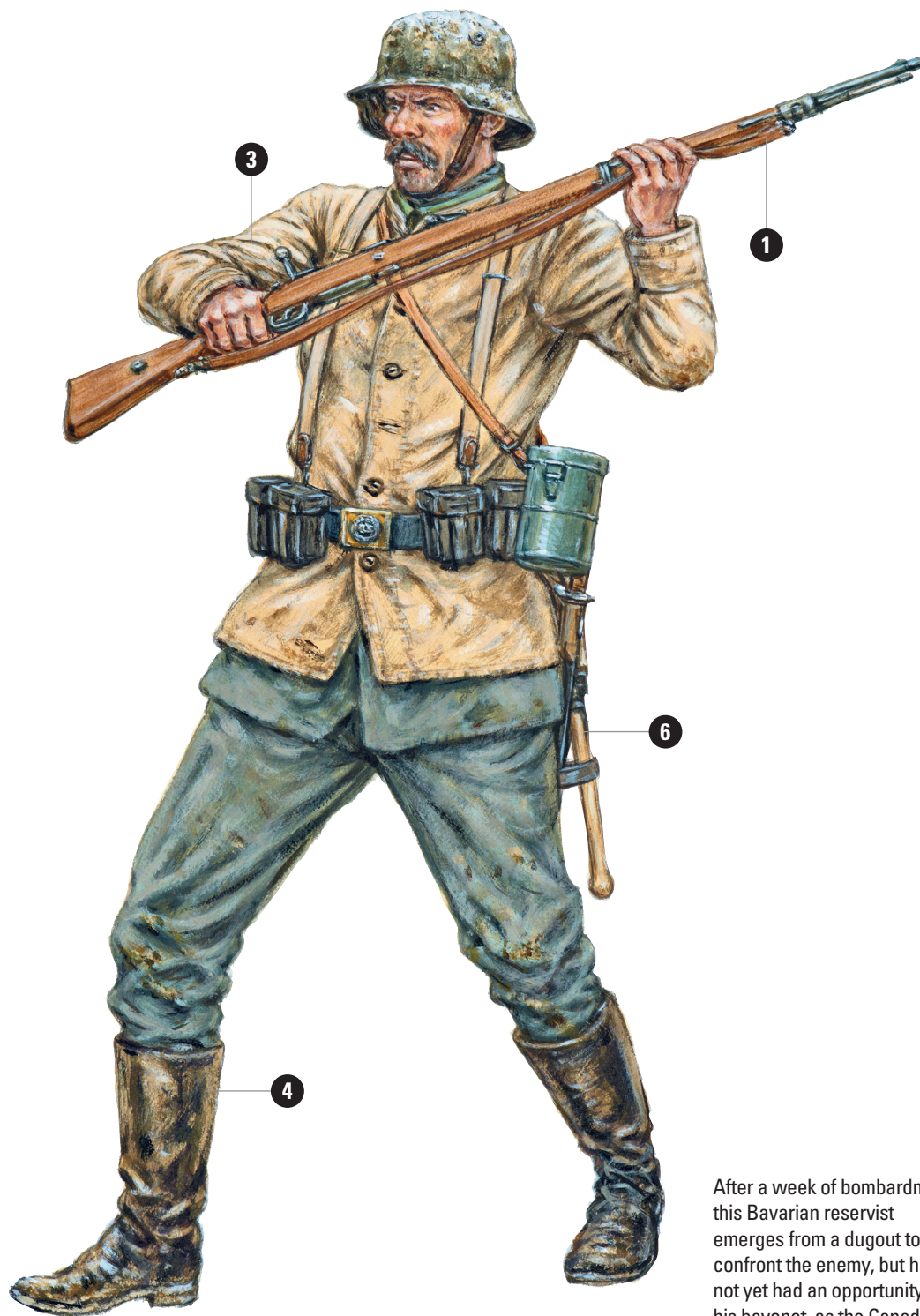
BELOW LEFT

Bavarian bugler, Lechfeld camp, c.1914. The uniform includes 'swallows' nests' on the shoulders, the traditional mark of a musician. Lager Lechfeld, south of Augsburg, was constructed as a military camp in 1864 and later connected to the railway. During World War I it also housed prisoners of war.

BELOW RIGHT

Bavarian NCO equipped for mountain warfare with mountain boots, corduroy trousers and a *Stange* or long pole with spiked tip for traversing deep snow, 1915. Bavaria was a major contributor to ski units and the Alpenkorps.





After a week of bombardment, this Bavarian reservist emerges from a dugout to confront the enemy, but has not yet had an opportunity to fix his bayonet, as the Canadian attacking troops follow hard on the heels of the artillery fire.

Vimy Ridge, 9 April 1917



Weapons, dress and equipment

This soldier is armed with the 7.92mm Mauser Gewehr 98 rifle (1), an accurate, five-round arm carried by the majority of the front-line German infantry. His field-grey uniform and Modell 1916 *Stahlhelm* (steel helmet; 2) are common to soldiers at the front, but this man has added his *Drillich-Jacke* (drill jacket; 3) over his field uniform jacket against the cold and mud, the Easter Monday battle at Vimy being fought in flurries of snow. Watchcoats and greatcoats were worn by sentries, but not usually for combat at this time of year. His regiment is not obvious as the red-numbered shoulder straps were worn on

the field-grey uniform, not the drill jacket. Ankle boots and puttees were more common by this date, but this old soldier has kept his long *Marschstiefel* (marching boots; 4).

Being in a defensive position he does not carry full equipment, but makes do with the essential minimum: water bottle (5), entrenching tool (6), bread bag with his remaining rations (7) and Modell 1916 gas mask in cylindrical metal container (8). His ammunition pouches are supported by a bread-bag strap around his neck. His uniform and equipment weigh roughly 45lb.



Bavarian armoureders at Hammelburg camp: the machine guns are (left to right) a Russian Maxim, German MG 08 and a French St Étienne. Hammelburg camp, near Schweinfurt in Lower Franconia, opened in 1895; the machine-gun school here was created in 1914.

there was a storm battalion with each army, and the use of counter-attack battalions and divisions striking from behind the trench positions was standard procedure.

According to 1917's *Anleitung für Kompagnieführer*, or instructions for company commanders (Anon 1917), the basic infantry training schedule was now a packed 12 weeks. In the first week came physical training, 5km and 10km (3- and 6-mile) marches, teaching on the roles of various ranks, the basics of the rifle, shooting positions, and sight setting. Also included were simple entrenchment, bayonet fighting, and the throwing of dummy grenades. Week two included rifle movements and loading; engagement of targets up to 500m (545yd); jumping and running; and *Gefechtsdrill* (combat drill) as part of the *Gruppe* or squad. Grenade training moved on to throwing in various positions and in trenches over traverses. Field instruction now considered barbed wire, foxholes, latrines and sentry duty. A march was undertaken at night with scouts employed. In addition to more physical training, theoretical instruction and grenade throwing, week three included shooting under combat conditions, running and going prone with repeats, exercise in gas masks, and work in shell holes. In week four, training in sections and shooting continued, and practice grenades were thrown into and out of cover. There was work on crossing ground under artillery fire and the attack, and traversing obstacle zones and sand pits with rifle and *Sturmgepack* or assault equipment. A 20km (12.5-mile), day-long march was undertaken in two parts, packs carried empty. Additionally, NCOs studied daily routines in trenches and behaviour on leave. For week five, many of the subjects were repeated or elaborated with additional work on signals, and attack with fixed bayonets and live grenades.

By week six many of the basics had been grasped and were repeated from previous weeks, with the addition of work on protective shields and fighting in woods and villages: NCOs now looked at topics such as simple armoureders' tasks and bivouacs. The march now extended to 25km (15.5 miles), covered in two parts with full pack. In week seven, fire discipline was improved, written and verbal orders examined, and platoon shooting and attacks undertaken



The MG 08/15 machine gun weighed 43lb with a full water jacket and fed from cloth ammunition belts. Crucially, however, it was easier to move than its big brother the MG 08, so deployment in increasing numbers in 1917 made an important contribution to the infantry battle.

with equipment and gas masks. Quick crossing of difficult obstacle zones and trench clearance formed physical counterpoints to group singing instruction. Platoon exercises continued the next week, with an emphasis on field works and reconnaissance, while NCOs also looked at iron rations, the use of basic soldier's documentation and identity disks, weapon cleaning and materials, and behaviour between comrades. To the misery of the long march were added carriage and use of digging equipment. With NCOs studying the routines of trench warfare, private soldiers repeated much of week eight in week nine, plus message running and night work. Week ten saw the entire company exercise together with machine guns; a 30km (19-mile) march; outpost and patrol work; and refreshers on other drills. The last two weeks also featured repeats, with additional instruction on observation work, night training, shock troops, machine guns and telescopic sights.

Completed thoroughly, this was an excellent course, but to keep pace required instructors with up-to-date experience, new weapons and equipment, 'schools' for specialist subjects, and continual rewriting of training literature. A brief general manual of *Nahkampfmittel* or close-combat weapons had appeared as early as August 1916, and was followed by a fuller treatment on New Year's Day 1917. Particularly important subjects for study in the coming year were the MG 08/15, a lighter version of the old MG 08 Maxim machine gun, and the *Granatenwerfer* or small spigot mortar. Four MG 08/15 weapons were issued per regiment early in 1917, increasing to two per company in May, and four per company in September. Mortars had been a weapon of the *Pioniere* (assault engineers), and a small spigot mortar had existed since late 1915. The *Granatenwerfer* was deployed on a scale of 24 per infantry regiment early in 1917, however, and by August it was usually deployed two per infantry company.

German *Pioniere* (assault engineers) with a Lanz-type smoothbore light *Minenwerfer*. The muzzle-loading 91mm Lanz was manufactured by Heinrich Lanz of Mannheim c.1915–16, and had a maximum range of about 490yd. According to the original caption this picture was taken 'near Vimy, before Arras', probably no later than the beginning of 1917.



Lt-Col A.P.D. Birchall falls while leading Canadian troops of the 4th Battalion (Central Ontario) at Second Ypres, 23 April 1915. (Photo by: Universal History Archive/UiG via Getty Images)



ON THE BATTLEFIELD

Canadian

Though a Canadian hospital unit was operational in November 1914, and the ‘Princess Pats’ landed in France that December, Canadian commitment was relatively slow, and compared to the Bavarian war effort, small. This apparently obvious fact would be somewhat offset by the way Canadian troops were deployed, with gradual effort to build up a Canadian Corps on one sector of one front. Early in 1915 Canadian infantry brigades were attached to British divisions on the Western Front, and following this baptism of fire, 1st Canadian Division took over a section of the line at Fleurbaix. In April the division relieved French troops in Belgium, and at Second Ypres (22 April–25 May 1915) the Canadians fought their first major engagement, gas being employed by the Germans on a large scale for the first time. Commanded by Britain’s Lt-Gen Edwin Alderson, 1st Canadian Division was also heavily engaged at Festubert and Givenchy, before the arrival of 2nd Canadian Division in September. The Canadian Corps proper was now formed under Alderson, taking position opposite II. K.B. Armeekorps at Messines. A 3rd Canadian Division was complete by Christmas 1915, and the 4th was formed from units already in France in April 1916.

After an uncharacteristically poor showing at St Eloi Craters, arguments concerning Alderson, Maj-Gen R.E.W. Turner, GOC 2nd Canadian Division, and Brig-Gen Huntly Ketchen, were brought to a head when Gen Sir Herbert Plumer, GOC Second Army, sought the dismissal of Ketchen. The Canadian officers were supported by Militia Minister Sam Hughes, and Field Marshal Sir Douglas Haig advocated a diplomatic solution by which Alderson was pushed into the position of Inspector General of Canadian Forces, and the CEF was placed under Lt-Gen Sir Julian Byng. After the hard-fought action at Mont Sorrel in June 1916, Byng succeeded in refusing the son of Minister Hughes a position of divisional commander, instead promoting Brig-Gen Louis Lipsett to lead 3rd Canadian Division. Byng enjoyed the confidence not only of British High Command, but of his men, both imposing discipline and resisting cronyism. Henceforth the Canadian Corps would enjoy the unofficial soubriquet ‘Byng’s Boys’.

The Canadian Corps was deployed to the Somme in September 1916, fighting at Flers–Courcelette where tanks were used for the first time, but the

Canadians suffered 7,000 casualties in a week. Towards the end of the month the Canadian Corps attacked again at Thiepval, and repeatedly in October at the infamous Regina Trench. Partly as a result of continued losses, it was decided to break up a newly formed 5th Canadian Division and send maximum reinforcement to pre-existing units. Canadian battalions were each allowed to exceed paper establishment by 100 men, and Canadian divisions now comprised up to 21,000 all ranks and all arms compared to 15,000 for the British.

Bavarian

Three Bavarian army corps and one reserve corps, totalling eight divisions, were committed in 1914, expanding as the war continued with the fielding of additional Reserve and Landwehr divisions, and the raising of 10. and 11. Königlich Bayerische (K.B.) Divisionen in 1915. Though there was no 13. K.B. Division, 12., 14. and 15. K.B. Divisionen were raised during 1916, and 30. K.B. Reserve-Division appeared in the order of battle on Boxing Day as a result of a rebalancing of Landwehr and Ersatz units. A 16. K.B. Division was manufactured in January 1917 by the expedient of drawing regiments from pre-existing divisions.

By this time Bavarian troops had fought widely, being prominent in the 1914 battles of the frontiers in the West, and occasionally on the Eastern Front, but the experience of individual units varied considerably, and regiments were shifted between divisions both to meet operational requirements and to create new formations as the bayonet strength of divisions was reduced over time. The lower-numbered Bavarian line divisions spent their entire war in the West, and were especially notable for their roles in the battles in Lorraine, Flanders and the Verdun and Somme campaigns. 6. K.B. Landwehr-Division spent most of its war in Lorraine. Formed in the Carpathian Mountains in 1915, 11. K.B. Division fought in Serbia and at Verdun, where its casualties reached 75 per cent of original strength; 12. K.B. Division fought in the Vosges as well as Romania. Immediately after its appearance, 16. K.B. Division would face the Canadians at Lens in February and March 1917.



'We hold together, firmly and faithfully', 1914. Men of the elite K.B. Infanterie-Leib-Regiment pose for a photo with the slogan 'London' – their intended destination. The motto of the Bavarian Army was *In Treue fest*, 'in firm faith'. The rifles are the old Mauser Gewehr 88, adopted by Bavaria in February 1889, a few months after Prussia.

LEADERSHIP AND MORALE

Canadian

By 1917 many of the first leaders of the Canadian Corps were dead, or had been replaced. Some went due to age or illness, others were pushed aside less willingly under suspicions of cronyism or incompetence. Crucial to this process was the waning influence of Militia Minister Sam Hughes, and the appointment of Lt-Gen Sir Julian Byng to lead the Corps in May 1916. Byng, an Englishman, had not sought the command, but was determined to do the best by his men in giving them good officers. As he explained, bravery without discipline or training led too easily to the squandering of lives:

The men are too good to be led by politicians and dollar magnates, and if the credit of the Corps is to be augmented, the men must be led by leaders. I don't want Imperial officers but I want to shove on the Canadians who have proved their worth and get rid of the Bumstunts ... I have no axe to grind of my own ... and am only trying to do my best for these men who have fought for 15 months. (Quoted in Hayes 2007: 88–89)

Quite how radically and quickly the leadership changed can be judged from the fact that by early 1917 six of 12 infantry brigadier-generals were Byng appointments, and 40 of the 49 battalion commanders were new. All told, the Canadian Corps had 118 senior command and staff positions, and of these a full 84 were installed under Byng. The new chief-of-staff was the able Brigadier-General Percy Radcliffe, selected by Haig. 'Faction' and inter-unit jealousy was frowned upon. That Byng operated fairly and promoted on merit was recognized both by his peers and by junior officers, it being observed that he was not too proud to listen to advice.

Though many good men had fallen in the Second Battle of Ypres, at Mont Sorrel and on the Somme, there were also improvements in company- and platoon-level leadership. Successful junior officers from 1st Canadian Division

Ebullient Canadian recruits 'blanket tossing' in camp. Popular among 'First Nation' Canadians, blanket tossing was something of a rite of passage, as suggested by contemporary photographs. Some of the men wear seven-button Canadian-made Service Dress jackets with standing collar, others various types of 'Cardigan Jacket'.

OPPOSITE

Men of the 54th Battalion (Kootenay) using a 'tumpline' to carry boxes, each containing 12 Mills bombs, September 1917. A single box weighed upwards of 25lb. Just visible on the shoulder of the corporal are a metal 'C54' title and battalion patch.







Convalescent Canadians at Sunningdale, c.1917. They wear the 'hospital blue' uniform with red tie, and Service Dress caps, that of the man on the right being the 1914-type 'winter cap'. Note the maple-leaf cap badges. In addition to the dead, 149,732 Canadian servicemen were wounded during the war.

were moved to 2nd Canadian Division and subsequent new divisions as they were promoted. In the first contingent many Canadian NCOs had been picked from the existing junior leaders of the Militia, from men who showed promise, or those who had served as professional soldiers in the British Army. Not all of these veterans made the grade and were sifted by the rigours of combat while a fresh generation of citizen NCOs were forged on campaign and by strenuous training.

It cannot be denied that the Canadians had a reputation for unruliness, even insubordination. Yet this tendency rarely manifested itself in battle, and many incidents could be traced to three root causes. The first was money: the Canadian private soldier drew C\$1.10 a day, or about three times as much as his British opposite number, and vastly more than his enemy. The Canadian could not understand why this sum would not buy plentiful supplies of everything in rationed

Britain, and envious British civilians did their best to part him from his wealth. More money did buy more alcohol, however. The second cause was weapons and equipment. Canadian troops quickly recognized that their first issue from home was inferior, and, impatient to remedy the situation before it became life threatening, begged, stole or borrowed whatever they could. The third cause was the Australians. Early colonial rivalry tipped over into violence in 1916, and friction reoccurred from time to time. Canadians were viewed by some regulars of the old school as undisciplined. From their own perspective they were breezy and boisterous.

Bavarian

The Bavarian officer and NCO corps were of high quality, having improved very significantly since the defeat by Prussia in 1866. While integration in the new Germany after 1871 was a politically mixed blessing, it brought significant military benefits, allowing the introduction of new ideas and training and a move away from a previous emphasis on home defence and fortification building. Particularly significant were the extension of a more effective form of conscription, and an increase in military spending, both of which allowed the development of more professional leadership. By 1917, however, three major factors were leading to stresses: the removal of many experienced leaders caused by heavy casualties; the degree of expansion and retraining required both by the massive enlargement of the Army and the changing nature of the war; and the need to place ever more responsibility on the shoulders of NCOs and junior leaders.

Recruits' service guides impressed upon the new soldier his duty, first to the Bavarian royal family, and second, to the *Deutsche Kaiserhaus*, the German



FAR LEFT

A Bavarian *Leutnant* wearing the Modell 1916 *Stahlhelm* helmet and the ribbon of the Iron Cross Second Class. Like the Canadians, the Bavarians suffered high officer casualties: Bavarian shortfalls in regular officers were made good only by the widespread use of reserve officers, deputy officers, and heavy reliance on senior NCOs.

LEFT

Vizefeldwebel Meier of K.B. 14. Reserve-Infanterie-Regiment, winner of both classes of the Iron Cross. His rank insignia appear on his collar: a band of braid and a large button bearing the Bavarian lion. Unlike ordinary conscripts before the war, NCOs were career soldiers. They were crucial to the infantry battle, particularly when officer losses mounted and tactics changed so that smaller units were spread across an apparently 'empty battlefield'.

imperial family, for in war, his Majesty, William II, German Kaiser, and King of Prussia, was the *Bundesfeldherr* or 'federal commander' of all German forces. The Bavarian soldiers' oath followed the same formula (Schulz 1915: 12). Military service was regarded as a mark of citizenship and a school for the rest of life, and the articles of war which the soldier was expected to know by heart pressed home duty to superior officers and comrades, irrespective of personal danger. Kriegs-Artikel C5 underlined the seriousness of the undertaking by reminding the soldier of a list of punishments up to and including the death penalty, though in the event very few German soldiers were actually executed.

Though morale remained surprisingly resilient in the wake of Verdun and the Somme, there were worries both about resolve on the home front, and the attrition caused by a long war in which the enemy appeared to grow stronger with the entry of the United States, while the Central Powers remained limited in resources. German Army postal surveillance pointed repeatedly to complaints about lack of food: in the 'turnip winter' of 1916/17 even the Army potato ration had to be eked out with turnips. There were also jealousies when soldiers normally employed in agriculture fared better than townsmen, as a report on leave in K.B. 6. Landwehr-Infanterie-Regiment explained:

the precarious matter of furlough causes discontent among the urban population and among small businessmen in particular. Despite insistent instructions, the population fails to see the necessity of privileging farmers due to the economic situation ... The ways in which requests for furlough, particularly week-long furlough, are reviewed by the local authorities at home, often based on questionable statements, is in many cases not flawless. It is nothing but natural that the troops are puzzled and bitter when small farmers are getting several weeks of furlough often more than once a year. (Quoted in Ulrich 2010: 118)

The British High Command was convinced, wrongly as it turned out, that a total collapse in enemy morale might occur quite shortly.

Vimy Ridge

9 April 1917

BACKGROUND TO BATTLE

Retrospectively, the battle at Vimy Ridge on Easter Monday, 9 April 1917 has come to be regarded as the first fully Canadian action, and even the birth of Canada as an independent nation. At the time it was perceived differently, for Vimy was but part of a bigger battle, Arras, which was itself just a part of a major campaign. The bombardment and ammunition expenditure were on a commensurate scale, as Capt Jack Fitzherbert-Brockholes, a staff officer serving with British 30th Division, recalled:

Rose very early and was at the Divisional Observation Post by 5.30 am and had just settled down when the show started. From where I was I could see the Vimy Ridge in the distance. On the stroke of 5.30 it became the most awe inspiring sight I have ever seen. It looked as if it was one sheet of flame from the bursting shells and also the liquid fire etc was poured on to it. It was still dark so nothing except the flashes of the guns and bursting shells could be distinguishable. The Bosche must have had an appalling time ... (Fitzherbert-Brockholes: 9.4.1917)

When the 10th Battalion (Canadians) – the ‘Fighting Tenth’ – arrived behind the front as part of 1st Canadian Division at Vimy on Good Friday, 6 April 1917, many of their number were already veterans; but this was nothing to be taken for granted. At the beginning of 1915 it had been feared that the battalion might be broken up to provide reinforcements for other units, and Lt-Col Arthur Currie, commanding 2nd Canadian Infantry Brigade, the battalion’s parent formation, had not even wanted them in his command. He cited the 10th Bn’s commanding officer at the time, Lt-Col R.L. Boyle, as having said his officers were ‘undersized and generally undesirable’ (quoted

in Dancocks 1990: 13). Yet the 10th Bn proved its detractors wrong. The battalion fought with determination at Second Ypres, where Maj D.M. Ormond stepped up to command after Boyle's mortal wounding. Following replacements, they went through the actions at Festubert and Mont Sorrel, gaining considerable experience of trench warfare. Already well blooded by the time of the Somme, they saw hard service at Thiepval and on the Ancre Heights, emerging with morale intact.

On the eve of Vimy Ormond's battalion included 33 men of Japanese origin, 22 of whom joined in March 1917, also half a dozen 'supernumerary Majors' (Dancocks 1990: 105), attached to the unit for the purpose of gaining experience. The commanding officer was not impressed with either. Fresh recruits with imperfect grasp of commands might complicate the work of company commanders. The extra majors, also untried in combat, presented different issues, for Ormond was unwilling to place them in positions of responsibility over junior leaders who had been fighting at the front for a year or more. Accordingly, he declared himself unwilling to absorb them other than as subalterns.

The troops were well armed and supplied. In addition to the usual rifles and Lewis guns, and support from Vickers guns of the Canadian Machine Gun Corps, the battalion was still also carrying two US Colt machine guns which were to be pushed forward in the wake of the attack. Munitions were meticulously stockpiled, with 75,000 rounds and 2,500 grenades for the 10th Bn alone. For consolidation of gains the battalion was allotted 250 shovels, 100 picks, 100 sheets of corrugated iron and 50 coils of barbed wire, together with stakes, pickets and nails. As usual in World War I infantry operations, effective communication was a *bête noire*. For the Vimy battle each attacking battalion of 2nd Canadian Infantry Brigade formed its own 'Report Centre'. This comprised the Intelligence Officer, six scouts, six signallers and four runners, carrying with them 'signalling fans' and ground sheets, with carrier pigeons and two signalling lamps following along in the last wave. These were to make for a prearranged point, getting any men not immediately required under cover. The Intelligence Officer was then to establish visual

A 4.5in howitzer during the bombardment of Vimy Ridge, after a painting by Richard Jack (1866–1952). This image offers a good impression of the terrain and artillery, but bare-chested gunners are likely to be artistic licence, as snow fell on 9 April. Five massive shell dumps were established to hold the bulk of the 1.6 million shells allotted to the Canadian Corps. A 'Canadian Counter Battery Office', established as early as February under Lt-Col Andrew McNaughton, processed information on enemy fire, and prepared to deluge the German gun positions. From 20 March shoots were organized against specific strongpoints and trenches identified from ground and air intelligence. Then, one week prior to the attack, the barrage intensified and was augmented by heavier howitzers. The 18-pdr field guns alone fired ten shells for every yard of frontage in this phase, and eight fortified villages behind the enemy front were pulverized by the heavies.



contact with observation posts to the rear, and make use of his own men as observers and messengers to relay information from the companies. As soon as possible a telephone wire would be laid out to the Report Centre: 'beyond this, it is impossible to lay down in detail what should be done' (10th Bn War Diary, Apr 1917: Appx 11). Lt-Col Ormond lectured all ranks on what was required of them, and during the early days of April the battalion was exercised at Estrée Cauchie: here a replica of the battlefield was laid out, with tapes and flags representing defences and objectives.

The 10th Bn would strike at the lines of 1. K.B. Reserve-Division close to the junction of K.B. 3. Reserve-Infanterie-Regiment with K.B. 1. Reserve-Infanterie-Regiment. While on paper a three-battalion German regiment was much larger than a single Canadian battalion such as the 10th Bn, which fielded 22 officers and 741 other ranks for the battle, at Vimy the Bavarians were significantly outnumbered. Major Anton Meyer's K.B. 3. Reserve-Infanterie-Regiment, the '*Reservedreier*' of Memmingen, had 1,000 effectives. Each company of the regiment was now expected to cover 350m (380yd) of the line, and, according to regimental battleworthiness reports, average company strength dipped to 80 men. In 12./KB 3. RIR, 31 men reported sick simultaneously. Accordingly, Meyer ordered the medical officer to return all but the most pressing cases to duty: only two of the 12 rifle companies could be rested to the rear, ten doing duty in the lines. In the front lines of the Loën-Süd sector were just two companies: 2./KB 3. RIR under Leutnant Hammer, and 3./KB 3. RIR under Leutnant Grafenstein. Leutnant Loibel's 1./KB 3. RIR and Leutnant Guggenheimer's 4./KB 3. RIR occupied the second position, back near Farbus Wood.

Immediately to the south was K.B. 1. Reserve-Infanterie-Regiment, commanded by Oberstleutnant Ritter von Füger. Raiding and bombardment had reduced the regiment to a total of 1,360 men. On the morning of 9 April its first- and second-line defences in the Wittelsbach-Nord sector were manned by just two companies: 10./KB 1. RIR under Oberleutnant Schwarb and 11./KB 1. RIR under Leutnant Gunsheimer. Two more covered the front of Wittelsbach-Süd, and 8./KB 1. RIR and 12./KB 1. RIR the whole third line, inadequately. 9./KB 1. RIR and 7./KB 1. RIR were spread in penny packets in the strongpoints at Augsburger Haus, Wittelsbacher Haus and the *Zwischen-Stellung* or 'in-between position' behind the front-line trenches. Two companies were held back in the 'second position', only one being in the 'rest quarter' of Oppy village. Overall command in Wittelsbach-Nord fell to Major Finsterer.

The southernmost regiment of the division was K.B. 2. Reserve-Infanterie-Regiment, which had suffered particularly badly from raiding, and now had just 850 men. Individual Bavarian battalions now averaged fewer than 350 men, and companies theoretically held back for immediate counter-attacks were forced to send sections forward to depleted areas. Many trenches and dugouts were flattened. As Major Meyer reported, 'In none of the First, the Third, the stop lines, or the intermediate position is it possible to speak of continuous lines of defence' (quoted in Sheldon 2015: 8).

While 1. K.B. Reserve-Division now fielded a total front-line infantry strength of a little over 3,000, it was set against two divisions and part of a third. 1st Canadian Division alone employed half a dozen battalions of two brigades on a narrow front, with two more in immediate support, and



A 15cm heavy field howitzer of 3. Batterie, K.B. 1. Reserve-Fußartillerie-Regiment, depicted earlier in the war. The Royal Bavarian Army included both heavy or 'foot' artillery regiments, and light 'field' regiments. The various models of 15cm howitzer, organized in four-gun batteries and throwing a 93lb high-explosive shell, formed an important category. Lack of heavy artillery seriously hampered the Bavarians at Vimy. Prior to the Canadian assault, K.B. 1. Reserve-Infanterie-Regiment reported that from 'midnight through to the morning hours, gas shoots continued' (Schacky 1924: 49–50); repeated requests for defensive fire were made with indifferent results. British and Canadian batteries, with more heavy pieces, and higher densities of shells with improved fuses, clearly achieved better results than on the Somme. Specifically, it was calculated that the bombardment at Vimy silenced or seriously harassed 83 per cent of the 212 identified German guns on 9 April (Miedema 2011: 112; Hayes 2007: 117). What the German artillery could do to the Canadian infantry was curtailed. As one German battle report explained: 'What the eye sees through the clouds of smoke is a sea of masses of earth thrown up and clouds of smoke rolling along ... among all of these are spitting fuses, slow burning gas shells, exploding trench mortar [bombs], and the white vapour appears to consume everything until it obliterates the whole spectacle of dancing madness in impenetrable fog. How long did this nightmare last? The sense of time seems intensified so that every moment is divided into one hundred moments of fear' (quoted in Hayes 2007: 115).

a further brigade of four battalions ready to push deep into the German position. In the initial battle the Bavarians would be outnumbered by factors upwards of five to one. Moreover, though from the Canadian point of view the German positions may have appeared impregnable, the Bavarian commanders already had significant worries. Over recent weeks they had noted that the Canadian Corps had closed in towards the centre, as if massing for attack; and a staff conference at Douai in March, attended by both First Quartermaster General Eric Ludendorff and Crown Prince Rupprecht, received negative reports on the defensive situation. Bad weather and inadequate manpower were compounded by insufficient artillery support, particularly in the 1. K.B. Reserve-Division sector, and lack of heavy howitzers. A planned pre-emptive strike, Operation *Munich*, was abandoned at the end of March.

Raids and patrols all along the front were a feature of the days leading up to the big attack. Capt S.H. Kent of the 10th Bn crept into no man's land on the night of 4 April to reconnoitre the ground, where he found an old French trench suitable as a 'jumping off point'. Deep craters dubbed 'Victoire' and the 'Argyll Group' presented serious obstacles, however, and at Kent's reckoning only 125yd of the battalion's planned 480yd frontage presented good going. Neither did entering the craters to clamber out again appear to offer a viable alternative, due to wiring, almost vertical sides and soft soil. A raid was launched on the night of 7/8 April, Maj A. MacDonald, Maj J.A. Motherwell and Lt A. Gibaut leading out three parties totalling 85 men, before dawn. The Bavarians responded with rifle fire and grenades, but their attempt to call down a defensive barrage met with a feeble response. In a bloody struggle Maj MacDonald was shot short of the enemy wire. Pte Henry and Pte Dunbar fell in with a group of nine Germans, killing four and capturing two, while Sgt Stone led a 'bombing party' down the trench, tossing grenades into four dugouts. The raid cost five Canadians dead and 13 wounded, showing conclusively that German resilience was not yet broken. Accordingly, the men of the 10th Bn moved back from their own front-line trenches that afternoon, allowing the divisional artillery to pour down again upon the enemy.

Even without this additional artillery fire the preparatory barrage had been complex and lengthy, with much work taking place long before the infantry assault. Firing continued night and day with specific attempts to clear wire, and machine-gun barrages overlaying shells, further impeding German movement and damage repair. The result was a week of suffering for the defenders.

Vimy Ridge, 9 April 1917

MAP KEY

- 1 0530hrs:** Zero Hour. The Canadian Corps attacks on a four-division front behind a creeping barrage. Many Canadian battalions take heavy casualties despite the damage inflicted by the artillery.
- 2 0610hrs:** Pte Madge of 10th Bn is detailed by Maj Hugh Ferguson to report the taking of the Black Line *Zwölfer-Stellung* position.
- 3 0707hrs:** 10th Bn overruns the Red Line *Zwischen-Stellung* position. K.B. 3. Reserve-Infanterie-Regiment is dealt a crushing blow, with survivors retreating. The right flank of

1. K.B. Reserve-Division is overrun. K.B. 1. Reserve-Infanterie-Regiment is unsuccessful in launching counter-attacks.

4 0730hrs: 1st Canadian Infantry Brigade advances through the centre of 1st Canadian Division and continues the attack, pushing through to the Blue and Brown lines.

5 Midday: 1st Canadian Division elements are in Farbus Wood, but out of contact with 51st Highland Division on the right. The commander of K.B. 1. Reserve-Infanterie-Regiment holds a tenuous line to the east: 1st Canadian Division has achieved all its objectives despite continued resistance further north.

Battlefield environment

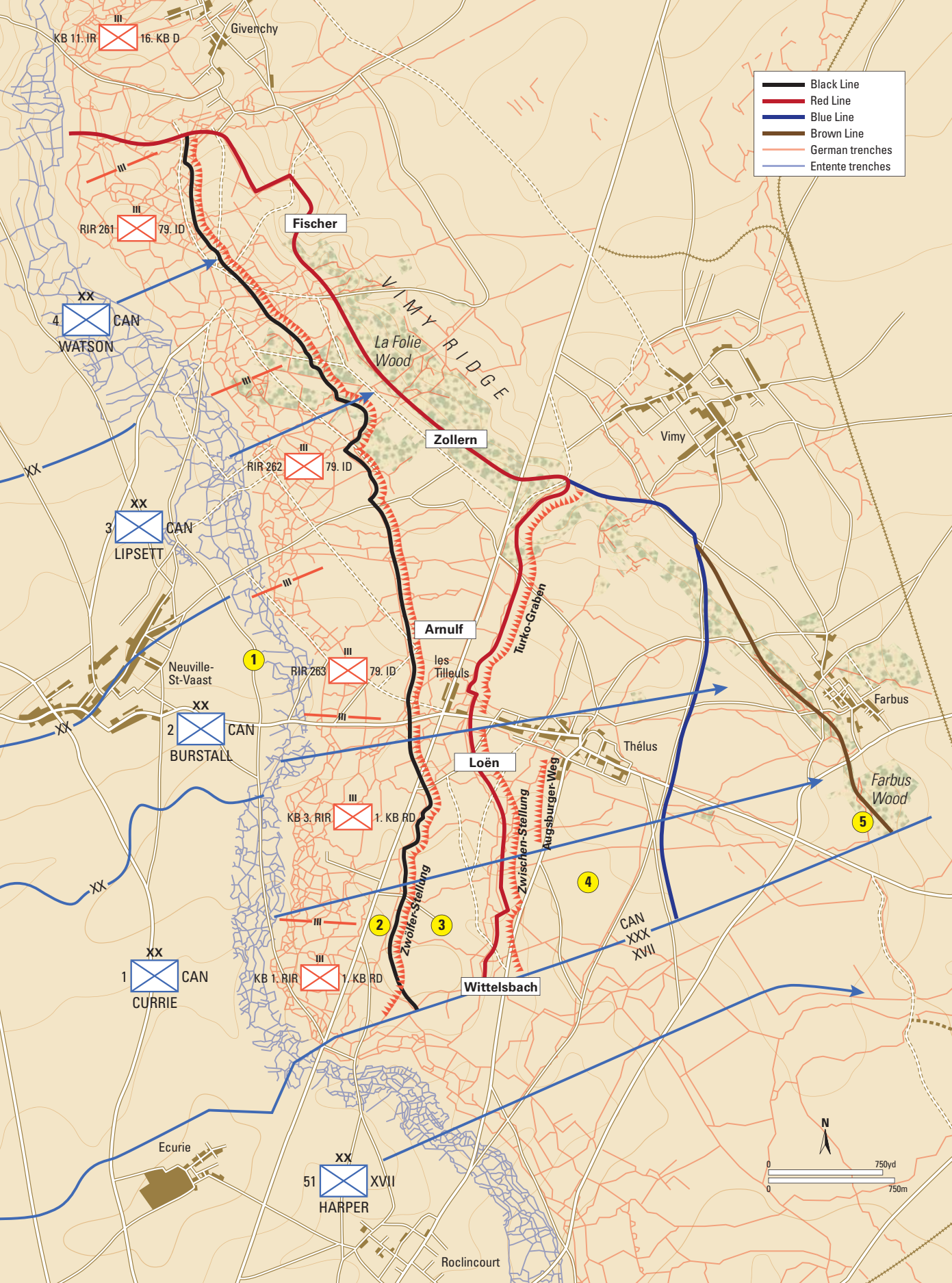
The Canadian Corps' role in the first phase of the British battle at Arras would be to break the enemy line between Givenchy-en-Gohelle in the north and Farbus Wood in the south, in an area dominated by Vimy Ridge, which rose to a maximum height of 475ft and ran roughly north-west to south-east through the German position. The four Canadian divisions were arranged side by side in numerical order, with 1st Canadian Division at the southern end and the 4th at the north.

The German defence rested on Gruppe *Vimy* under General der Infanterie Karl von Fasbender, the commander of I. K.B. Reservekorps. The designation 'Gruppe *Vimy*' was introduced

just a week before the battle, along with Gruppe *Souchez* for the command to the immediate north and Gruppe *Arras* to the immediate south. The troops of 1. K.B. Reserve-Division and 14. and 16. K.B. Divisionen formed the main strength of the line between Angres and Roeux, but the German deployment also included the Prussian 79. Reserve-Division on the Vimy heights. While the defence of Hill 145, the tunnellers' war and the fighting at 'The Pimple' have attracted considerable interest, it was actually just to the south, on the fronts of 1st Canadian Division and the British 34th Division, where better progress would be made on Easter Monday, 9 April 1917.

This postcard was sent back to Saxony by a soldier of Reserve-Infanterie-Regiment Nr. 104 in November 1916, though the image was probably taken significantly earlier. In early April 1917 the Vimy Ridge battlefield already bore the scars of much previous fighting, with mine craters and shell holes forming important tactical features. On the Princess Patricia's Canadian Light Infantry's sector, for example, there was 'a series of great craters that had been blown in the Spring. At no point were the two lines more than 75 yards apart; and the outposts consisted of a large number of crater posts, connecting with intricate systems of fighting and communication trenches behind' (Hodder-Williams 1923: 191).





INTO COMBAT

A complex and effective 'creeping barrage' was shot over the heads of the Canadians as they advanced. With an 18-pdr for every 17.5yd of infantry frontage, a deluge of shrapnel advanced directly in front of the infantry, with each gun dropping an average of nine rounds in three minutes, before lifting to the next position 100yd on. This *Feuerwand* or 'wall of fire' helped keep German heads down and machine-gun positions unmanned. Beyond these light shells, 150yd further on, was a 'standing barrage' isolating the immediate battle zone and discouraging German concentration, and a third heavy barrage moved 300yd deeper still. Big shells could smash bunkers, but falling upwards of 500yd away from the attacking infantry were unlikely to hit friendly troops. Another battery per Canadian infantry brigade was held in reserve to respond to 'SOS' calls and targets of opportunity. After 75 minutes the fire patterns shifted, maintaining a rolling barrage, but also picking out strongpoints further to the rear. McNaughton claimed a further 47 German guns destroyed as hitherto unidentified enemy batteries opened fire in response to calls for help, and were themselves targeted. The Canadian infantry were deafened, but appreciative:

The barrage which opened at 5:30 am was a honey, the heaviest and most accurate seen up to that time. In many places German trenches and strong points badly damaged by continuous pounding during previous weeks were completely wiped out. The first lines of assault, already on the ground halfway over, largely escaped what counter barrage the Germans were able to mount ... (Clements 2013: 168)

Five minutes before zero the front-line men had crawled silently over the parapets into no man's land and assembled. 2nd Canadian Infantry Brigade gave explicit orders for accoutrement for the Vimy operation: officers were to wear web equipment, and not carry sticks. The 'fighting dress' of other ranks comprised the haversack worn in place of the pack, and 120 rounds of ammunition supplemented by two Mills bombs, 'carried one in each top pocket of the jacket. These grenades are intended to be collected into a dump as soon as the objective has been gained, and are not to be used by the individual except in an emergency'. 'Aeroplane flares' were put in the bottom pockets of jackets for later use. Five sandbags per man were issued to be 'carried under the braces across the back'; one filled water bottle was taken, and an 'iron ration' was put in the haversack, together with the 'unexpended portion of the current day's ration'. A tin of 'solidified alcohol' for heating went into the mess tin. Fifty pairs of large wire-cutters per battalion were tucked into waist belts and attached to men's shoulder straps by a string. SOS rockets were handed out 12 per company; phosphorus grenades went to 'Mopping Up' parties. Dual-purpose 'Hand and Rifle' grenades were carried by 'Bombers', 'either in Waistcoats, canvas buckets, or sandbags. Not more than 15 grenades per man'. At least five rods and cartridges for rifle projection completed the rifle-bombers' equipment. As distinguishing marks certain specialists wore a band on the left forearm: green for scouts, red for runners, blue for signallers, khaki for salvage parties, and black for traffic control. Men with wire-cutters or -breakers had a white tape on the right shoulder

strap. Two blue-and-yellow 1st Canadian Division 'battle flags' were carried with each platoon, to identify to the artillery 'the line gained by leading infantry'. To signal position these flags were waved; when stationary they meant nothing. They were not to be stuck into the ground, which could have led to confusion if troops advanced beyond or retired from them (10th Bn War Diary, Apr 1917: Appx 12).

With awareness that an attack or patrol action against K.B. 3. Reserve-Infanterie-Regiment was commencing, K.B. 1. Reserve-Infanterie-Regiment ordered forward its tiny reserve from Oppy village. The 10th Bn was likewise on the move, but Lt-Col Ormond was painfully aware that having launched the battalion his influence on the action would be limited indeed: 'You see, you don't know anything about how things are going for twenty minutes. Anyone who thinks they can tell every two minutes, you're crazy. The person in command should go to sleep for from twenty to forty minutes after the kick off, so that he won't bother people who are doing the job' (quoted in Dancocks 1990: 113).

Similar problems applied to commanders on the other side of the line, as was reported by Major von Poschinger of K.B. 3. Reserve-Infanterie-Regiment:

After extremely heavy artillery and mortar fire come down on the sector during the night 8/9 April, just as it had for the past few days, destroying almost all of the dugouts of the first position, at 5.30 am 9 April drum fire started coming down all along the divisional sector. From this moment onwards all contact was lost with the front line. After the heaviest imaginable drum fire by artillery and mortars, lasting a quarter of an hour, the infantry began its attacks in great waves. Opposite sub-sectors L3 and L4 the enemy used flame throwers and, at the moment of attack, two enemy aircraft were in the air above the position. (Quoted in Sheldon 2008: 284)

Good as the barrage might have been, the 10th Bn lost its first 12 casualties – four dead and eight wounded – to friendly fire

With communications difficult, much relied on Canadian advanced planning, which was kept as simple as possible. 2nd Canadian Infantry Brigade, including the 10th Bn, went in four waves, the first two of which were close to the barrage, to capture and consolidate the first objective or 'Black Line'. The bombardment would then pause, hammering first 100yd east of the Black Line, then 200yd east, before setting off again. This time it would be closely followed by the third and fourth waves, which had formed up ready for their attack on the Red Line at the *Zwischen-Stellung*. The 10th Bn was the leftmost of three battalions in 2nd Canadian Infantry Brigade, with the 7th Battalion (1st British Columbia) in the centre and the 5th Battalion (Western Cavalry) to the right. The 8th Battalion (90th Winnipeg Rifles) followed up in support, bringing with it eight Vickers guns of the 2nd Canadian Machine Gun Company and four mortars of the 2nd Canadian Trench Mortar Battery to help defend the captured objective line. With 2nd



Leaving the trenches, Vimy. In the distance are scattered assault or 'mopping up' waves, while the figures in the foreground are equipped for consolidation, carrying spades and other items. Half-full Mills bomb boxes appear on the lip of the trench. The conditions were described by Sgt Clements of the 25th Bn: 'Just before daylight the weather took its usual filthy turn. There was thick wet snow and sleet, driven by a heavy northwest wind. This had at least one temporary advantage in lessening the possibility of early detection by the Germans of the approaching assault. Otherwise, it simply added to the misery of thousands of men lying unprotected out in the open waiting for zero hour ...' (Clements 2013: 167). (Roger Violett / Getty Images)

OPPOSITE

Part of 2nd Canadian Infantry Brigade and its attacking formation. Waves 1–4 are the 10th Bn, while the final two lines marked 'Carriers and support' are drawn from the 8th Bn. The attacking Canadian battalions each assumed a two-company frontage, with each company on a two-platoon frontage. Snipers of the three assaulting battalions were to 'advance with their units, taking advantage of any targets which may offer themselves, and take up positions which they will select in the rear of the black objective, and will subsequently move onto the red objective' (10th Bn War Diary, May 1917: Appx 12). For the 10th Bn's first two waves, Maj Hugh Ferguson's A Coy led on the right, Maj Alfred Dawson's D Coy on the left. The troops were arranged in a double line separated by a 'mopping up' party. That Maj Dawson, a supernumerary officer, was so conspicuous in the vanguard was unexpected, for Lt-Col Ormond had complained he 'lacked keenness', had not come to France of his own choosing, lacked the stamina and attitude required of an officer, and was 'too highly strung and nervous ... ever to be given command of men in an engagement' (quoted in Dancocks 1990: 110). The charitable would assume that Dawson had proved his commanding officer wrong, and was now trusted; the cynical, that he was deliberately exposed in place of others more highly valued. The third and fourth waves, comprising Maj A.W. Sparling's C Coy on the right and Lt S.P. Stewart with B Coy on the left, came 100yd behind; these advanced in loose single-file section columns until required to fight.

Canadian Infantry Brigade in position, 1st Canadian Infantry Brigade would move through, extending the advance to the Blue and Brown lines a full 1.9 miles from the start. In accordance with orders a selection of key personnel were 'left out of battle' to ensure a skeleton remained on which to rebuild should losses be high. The initial clashes would see individual Canadian platoons taking on what remained of the Bavarian companies, now often encountered as individual machine-gun crews or small groups of riflemen. As the 16th Battalion (Canadian Scottish) historian explained, the general scheme was an improvement on what pertained in 1916 for several reasons:

In the attack units, instead of moving into battle on a broad front in a succession of straight lines as previously, went forward on a narrow front; companies and battalions attack one behind another in irregular formation which gave them the maximum protection from artillery and machine gun fire and enabled them to take full advantage of ground and weapons. When the first objective was captured, the second wave 'leap frogged' the leading troops and pressed on to the enemy's second line of defence; and, that captured, the succeeding waves passed through to further objectives ... (Urquhart 1932: 191–93)

Such was the theory, but Maj Ferguson was hit for the first time before he had led A Coy 50yd. Propped up by his runner, he covered another 100yd before being struck a second time. Refusing to give up, he carried on. With other officers and NCOs dropping to rifle and machine-gun fire, command rapidly devolved to some unexpected candidates. Pte Dunbar, who had already distinguished himself in the raid, now led a section, and succeeded in bayoneting an enemy soldier and attacking another before falling mortally wounded. With the unhappy Maj Dawson soon out of action, Capt Leo Carey now led D Coy, half of which was out of action early in the attack.

After this the infantry battle became an unequal running fight, 'men rushing from shell hole to shell hole, the bodies of the fallen indicating by their position the locations of the enemy's guns towards which this fighting was directed' (Urquhart 1932: 214). The history of the 10th Bn described the action:

The thunder of the guns was deafening, all-pervading, and the whine of the speeding shells merged into a crescendo of shrieking whistles as the guns, big and little, settled down to their work. S.O.S. rockets hovered in showers above the enemy lines, and his guns answered these frantic appeals for help with a scattered ill-directed barrage, much less effective than the fire maintained by his machine guns and snipers. British counter-battery work was stifling the German gunfire.

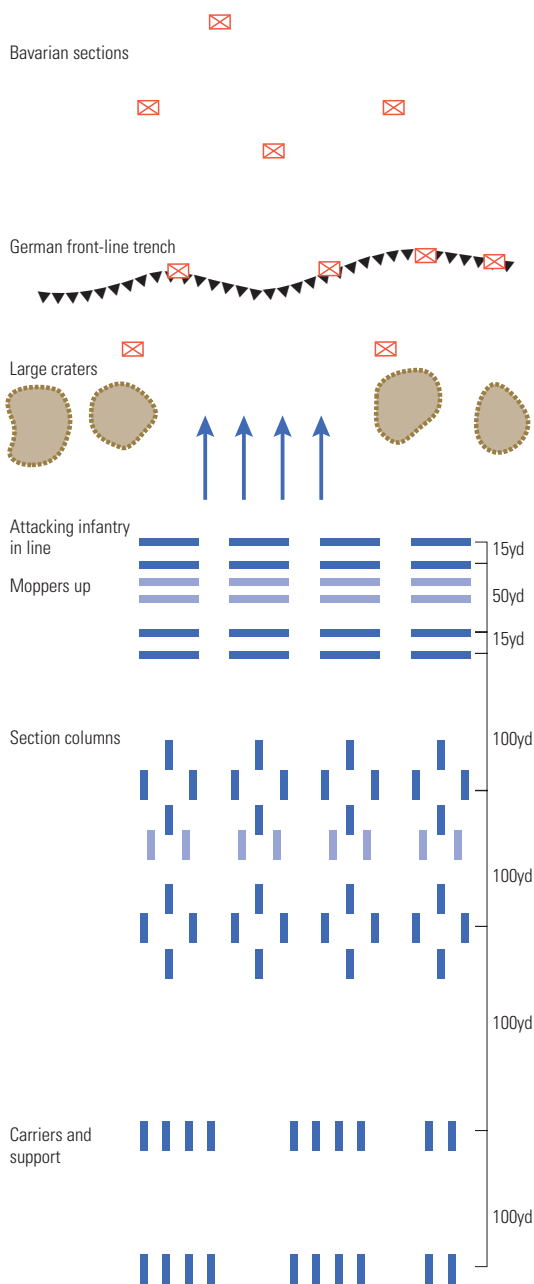
The 10th Battalion left the 'jumping-off' trench immediately the signal was given, and trudged through the muddy shell craters after the barrage, stolidly and imperturbably, indifferent to the bullets which sang and hummed through the shell-smoke like hiving bees. Men crumpled up and fell into the water-filled craters right and left, but the advance continued relentlessly. At 6.30 a.m. the first objective, the German front line, was reached. Gun crews still fought their weapons and snipers lying in the broken ground were still firing from hot rifles as fast as they could load. 'Mopping up' parties systematically cleared the dug-outs, and scores of prisoners were herded towards the Canadian lines. German dead in blood-spattered heaps blocked the trench ways.

The 10th Battalion with only one officer left, continued the advance towards the enemy's second line, encountering the same form of opposition – machine guns and snipers. The Hun had modified his method of warfare. His infantry could no longer be depended upon to cross bayonets with the British. His principal defence now consisted of picked machine gun crews and snipers, either forced or sworn to fight to the last. Many were found chained to their guns. (Holland 1918: 28–29)

One of the Bavarian machine guns was engaged by Lt Charles Stephenson, who organized a party of his platoon and succeeded in taking it despite being shot through the throat. The reference to men chained to their machine guns is interesting, but misleading. Odd examples of the German MG 08 can be seen fitted with a sturdy chain, but these appear to have been used either as an aid to hauling, or for securing the weapon itself. When machine guns were blasted by artillery, or crewmen cut down attempting to extricate the guns, it was only a small step to assuming gunners and weapons had been chained together.

The forward companies of K.B. 3. Reserve-Infanterie-Regiment were shattered, survivors falling back as best they could. The command post at Augsburg Haus was also quickly overrun. Hauptmann Bottmann, commanding II./K.B. 1. RIR in the southern part of his regimental sector, also found himself outflanked, and moved out of his own command post where a single platoon and machine gun were available and brought the Canadians under effective fire. Those personnel of II./K.B. 1. RIR who were still capable retreated, and at about 0830hrs a flurry of snow intervened, by which time the Bavarian flank here rested essentially 'on the cover of two machine guns' (Schacky 1924: 52).

According to the Canadian after-battle report, Maj Sparling was the only officer of the two leading companies still on his feet at the first objective, and directed the advance to the second. He displayed 'great skill and courage', and on spying an 'enemy sniper picking off his men, he personally rushed this man, disarmed and effectively dealt with him' (10th Bn War Diary, Apr 1917: Appx 93). As the 10th Bn pushed on, NCOs remained prominent in the battle. Sgt Henry handled a platoon effectively, at the same time inflicting more than one casualty on the enemy. L/Sgt Shoesmith and Cpl Maiden also led platoons; Cpl Camine ended up with two platoons. Pte Rowley led a 'mopping up' party. The Lewis-gunners – Cpl Burkett, Cpl Eakins,





Canadian infantry crossing no man's land, Vimy, April 1917: note the Lewis gunner near the centre of the picture. The strung-out files and slung arms suggest that this is a supporting formation. The attack of the 10th Bn at Vimy was exemplary. The Red Line was seized and consolidated, the successive waves of 1st Canadian Infantry Brigade advancing through in such good order Ormond thought they looked as though they were taking part in a drill. (Print Collector / Getty Images)

L/Cpl Correy, L/Cpl Jackson, Pte Hincks, Pte Fisher and Pte Bowering – all distinguished themselves. Burkett and Eakins were both wounded but continued firing; Correy worked himself forward into 'commanding positions'. Jackson took on a machine gun, suppressing its fire and saving the lives of comrades, while Hincks and Fisher both handled their guns with great skill. Meanwhile, Bowering was 'doing great execution, dealing many casualties to the enemy, advancing with his company and firing from the hip. When his ammunition supply became exhausted for the moment, he rushed a group of four Germans, using his gun as a club, killing one of the enemy and causing the other three to surrender' (10th Bn War Diary, Apr 1917: Appx 93). The Colt guns were heaved as far as the Black Line but, owing to the time taken to move them and set them up, contributed little to the firefight. They would not be used again.

Shortly after 9.0 a.m. the 10th Battalion reached its second and final objective. Messy work with the bayonet and bomb quickly stifled the opposition, and in an incredibly short time the second herd of erstwhile fighting Bavarians were running eagerly towards the safety and hospitality of the Canadian lines. They were unfeignedly glad to be out of it, and required no escorts. (Holland 1918: 29)

Prominent in this 'messy' fighting was the 10th Bn's second-in-command, Maj Walter Critchley, who dealt

personally with several of the enemy who offered resistance ... The advance to the railway line was continued by supporting battalions, while the 10th Battalion settled down to consolidate the captured positions. They had suffered very severely and the men were exhausted from the heavy 'going', but they turned to with a will proud in the knowledge that they had borne a good part in the taking of Vimy Ridge. (Holland 1918: 29)

Repeated and highly unrealistic orders were issued for K.B. 1. Reserve-Infanterie-Regiment to recapture the northern part of the *Zwischen-Stellung*. Several attempts were made to comply, none of which made more than 200yd headway.



Canon F.G. Scott, 1st Canadian Division's senior padre, reviewed the field of battle:

The German trenches were something never to be forgotten. They had been strongly held and fortified with an immense maze of wire. But now they were ploughed and shattered by enormous shell holes. The wire was twisted and torn, and the whole of that region looked as if a volcanic upheaval had broken the crust of the earth. Hundreds of men were now walking over the open in all directions. German prisoners were being hurried back in scores. Wounded men, stretcher bearers and men following up the advance were seen on all sides, and on the ground lay the bodies of friends and foes who had passed to the Great Beyond. (Scott 2000: 117)

According to K.B. 1. Reserve-Infanterie-Regiment and official histories, the defeat that day was down to three factors: artillery, numbers, and the crumbling of K.B. 3. Reserve-Infanterie-Regiment on the right. Yet while individual Bavarian companies were pushed back or lost and the Canadian breakthrough would shortly lead to the capture of the entire ridge, 1. K.B. Reserve-Division was very badly battered – but not destroyed. Remnants of all three Bavarian reserve infantry regiments fell back under the direction of Oberstleutnant von Füger, commander of K.B. 1. Reserve-Infanterie-Regiment, to be rallied on a tenuous line just east of Farbus and west of Bailleul on the evening of 9 April. Nevertheless, the pushing back of 1. K.B. Reserve-Division was crucial, as combined with the overrunning of parts of the 79. Reserve-Division position and the relatively poor performance of 14. K.B. Division, the Canadians gained a limited freedom of manoeuvre. Additional troops to prevent further eastward Canadian advance had to be pulled in from sectors not under immediate threat. Füger survived the day, but was mortally wounded three months later. Crown Prince Rupprecht ascribed the loss of the ridge to the non-appearance of German reinforcement, as ‘timely counterstrokes would have ejected them [the Canadians] or at least held them’ (quoted in Sheldon 2008: 329).

RIGHT

Canadian .303in Vickers machine guns at Vimy Ridge: by 1917 the Canadian medium machine guns were gathered together into the companies of the Canadian Machine Gun Corps. For the onslaught at Vimy, Corps Machine Gun Officer Raymond Brutinel had at his disposal 294 Canadian and 64 British-crewed Vickers guns. Of these, 230 fired 'barrages' and 104 were pushed forward with the attacking troops, 24 forming a reserve. (Universal History Archive/UIG via Getty Images)



FAR RIGHT

HM King George V (left) visits the front at Vimy, July 1917, with First Army commander Lt-Gen Sir Henry Horne, right. The portly figure on the duckboards is Lt-Gen Sir Arthur Currie (originally 'Curry'), who was promoted from command of 1st Canadian Division to take charge of the Canadian Corps in June. Like a number of senior Canadians Currie started his military career as a part-time Militia officer; his previous occupations were school teacher and not entirely successful businessman. (Print Collector / Getty Images)

Though a victory, the cost of Vimy for the Canadians was as great as many a defeat. After the battle Lt-Col Ormond reported 374 casualties: 101 killed, 252 wounded and 21 missing. A few of the missing were already dead, or died later. Recent Commonwealth War Graves data shows 106 officers and men of the battalion died on Easter Monday, the youngest whose age is known being 17; the oldest, Pte John McDonald, aged 47, was born on the Scottish island of North Uist, but emigrated to Canada aged 8. A further eight men died on 10 April. Interestingly, despite many references to officerless sub units, the number of 10th Bn officers actually killed at Vimy was four: three British-born lieutenants – A. Black, J.J. Moore and S.J. Odum – and Capt S.P. Stewart, a Canadian. Almost exactly half the personnel committed to battle were out of action: 15 per cent were dead or dying. The body of Pte Dunbar was not recovered. Four Distinguished Service Orders, six Military Crosses, five Distinguished Conduct Medals and 21 Military Medals were awarded.

As for the Canadians' Bavarian enemies, Ormond claimed they were of two distinct types:

the machine gun crews and snipers, were the equal of any of the enemy encountered by this unit, and fought to the last causing many casualties ... none were taken prisoner. The other type were men over 40 years, and a very few under 22 years. These fought well until our men were in actual contact with them, they then threw up their hands and expected to be taken prisoner. (Quoted in Dancocks 1990: 112–13)

It is unclear exactly how many men of K.B. 3. Reserve-Infanterie-Regiment and K.B. 1. Reserve-Infanterie-Regiment fell during the attack of the 10th Bn, as opposed to fighting against other units of 1st Canadian Division, but it is unlikely to have been many fewer than those lost by the Canadians: moreover, about 60 Germans were captured. Ormond noted the taking of four machine guns, 50 rifles and other equipment. A photo taken at Farbus after the battle shows approximately 50 German machine guns captured by the various Canadian battalions gathered together. As the Berlin history put it, those who had not fallen 'on the battle position in the northern sector, were taken prisoner' (Reichsarchiv 1929: 71).

Fresnoy-en-Gohelle

8 May 1917

BACKGROUND TO BATTLE

Attempts at exploitation followed in the wake of the opening of the battle of Arras and seizure of Vimy. East of the ridge the Canadians pushed on much less dramatically than on Easter Monday, but took the 'Arleux Loop', a bulge in the German line, on 28 April. On 3 May, in the midst of otherwise poor progress during the opening of the Third Battle of the Scarpe, the hamlet of Fresnoy-en-Gohelle, 1,000yd to the east, was attacked by elements of 1st Canadian Infantry Brigade (1st Canadian Division). In a frontal assault conducted in darkness, the 2nd Battalion (Eastern Ontario Regiment), supported on either side by the 1st Battalion (Ontario Regiment) and the 3rd Battalion (Toronto Regiment), stormed the German trench west of the village and three machine guns were knocked out. 'The 3rd Battalion combed the wood south of Fresnoy like beaters in a pheasant shoot and pushed on to the German support trench 500 yards beyond. This position – the Fresnoy switch – fell just before sunrise, but not before one of the assaulting companies had been reduced to 25 men' (Nicholson 1962: 276). The 2nd Bn mopped up through houses and dugouts, joining up with its fellows 250yd east of Fresnoy. Despite two swift and bloody local counter-attacks, the position was held. The seizure of Fresnoy was later described as 'the culminating point of the series of brilliant successes by the Canadian Corps during the Arras battles, the relieving feature of a day which many who witnessed it consider the blackest of the war' (Rawling 1992: 132).

Any jubilation proved premature. A day later the Canadians in Fresnoy village were relieved by British troops. As the War Diary of 12th Gloucestershire (5th Division) relates, German shelling was heavy from their first arrival in front of the village, in darkness, on the night of 4/5 May.



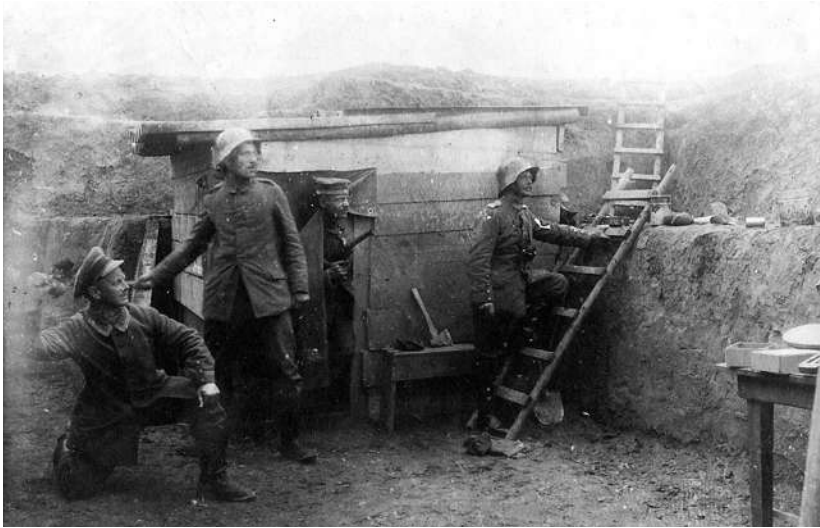
German troops take a rest from consolidating 'stormed trenches', Fresnoy Park, c.1915.

The trench line was impossible to reconstruct in daylight, so the men occupied a series of shell holes. Bombardment continued the next day, rising in intensity in the evening, when 12th Gloucestershire's B Coy observed enemy troops gathering, apparently in preparation to attack. An 'SOS' was sent and an effective barrage was brought down to disperse them. Nevertheless there were 23 British casualties, 11 of them fatal, and shelling remained 'continuous' though less intense on 6 May when there were further casualties including the commander of B Coy (WO 95/1580/1, 4–6 May).

Fresnoy was a dangerous incursion, allowing its occupiers views into flanking sectors of the Oppy–Méricourt line, and out towards the *Wotan-Stellung* to the east. A stone had been knocked from the defensive wall but there were nothing like enough troops in the vicinity to respond. Accordingly, 5. K.B. Division, under command of Generalleutnant Nikolaus Ritter von Endres, currently out of the line at Douai in army reserve, was alerted for a full-scale counterstroke. Costly as the battle

would be, the Bavarians could count significant advantages. First, as fighting progressed around Arras, the German forces had succeeded in concentrating more artillery. Second, 5. K.B. Division was rested and ready: in K.B. 21. Infanterie-Regiment *Großherzog Friedrich Franz IV von Mecklenburg-Schwerin* in particular, there were seasoned old hands who had not taken part in a major attack since 1914, alongside recent recruits yet to be committed. K.B. 19. Infanterie-Regiment *König Viktor Emanuel III von Italien*, suffering relatively few losses during the summer, had been recruited back to 80 officers and 2,180 men for its three battalions. Third, the weather and poor visibility favoured undetected movement. Last, and purely fortuitously, the blow would fall just as the Canadians reorganized on the northern flank of Fresnoy.

From 0300hrs on 7 May the Germans shelled 'all lines heavily', and again the bombardment went on all day, reinforced from time to time by trench mortars. Aircraft overhead apparently allowed the Germans to 'know every trench': 12th Gloucestershire's A Coy trench was 'obliterated' and the men moved into shell holes behind. At nightfall 4th Canadian Infantry Brigade reported gas shells falling (WO 95/1580/1, 7 May). With safe movement east of Vimy Ridge deemed impossible by daylight, 4th Canadian Infantry Brigade was ordered to complete the relief of 6th Canadian Infantry Brigade north of Fresnoy during the night of 7/8 May. According to operational orders, each company sent ahead an officer, and each platoon an NCO, with exchange made unit for unit. The 19th Battalion (Central Ontario) – codenamed 'Carrot' for signal security – under Maj H.C. Hatch, numbering 19 officers and 668 other ranks, was to occupy forward positions adjoining the British garrison of Fresnoy with three companies: A Coy to the left, B Coy in the centre and Lt S.H. Johnston's C Coy to the right. D Coy and the battalion headquarters were to provide support from the Arleux Loop. The companies moved at 15-minute intervals, but the relief was easier said than done: the



A trench garrison in the *Wotan-Stellung* on the Arras sector armed with grenades and a signal pistol. The *Wotan* sector east of Vimy was threatened by the Canadian seizure of Fresnoy, and it was here that the regiments of K.B. 5. Division prepared for their counter-attack of 8 May.

weather was bad, and Lt-Col J.M. Ross, CO 29th Battalion (Vancouver), made refinements to the relief as originally planned.

Worse, the German bombardment on Fresnoy and its surroundings began to intensify at about 1920hrs on 7 May. According to the history of K.B. 7. Infanterie-Regiment *Prinz Leopold*, 27 field batteries and 17 heavy supporting batteries fired 42,000 rounds and 17,000 rounds respectively. In addition, 100,000 shells were fired by neighbouring formations. Of this total, 27,500 were *Grünkreuzgranaten*, 'Green Cross' diphosgene gas shells, aimed at artillery positions as well as the front line (Schaidler 1922: 42). The 19th Bn made tortuous progress, as Pte Deward Barnes recalled:

The shelling was terrible. It was real heavy now as we got the whiz-bangs. And he certainly could send them fast. His field shells were a little lighter than ours and he fired them faster. Always when he was going to make a drive in the morning he shelled all night long ... Fritzies worried us. He never let up. He kept those whiz-bangs and heavies going fast from 2 am until daybreak. (Quoted in Cane 2004: 78)

Maj Hatch was more concerned that it was the first time the battalion had to undertake a relief through a gas cloud, particularly as many, like Barnes, were recent replacements. However, they behaved 'very coolly' (19th Bn War Diary, May 1917: Appx 2, p. 21). In the early hours of 8 May, the 19th Bn managed to link with 12th Gloucestershire's left, hitherto 'in the air', and work was started on repairing positions; however,

Owing to the large number of gas shells the enemy were sending over, the relief was very difficult, but our casualties were very light. At 3.45 am, when the relief with the exception of two platoons was complete, the enemy opened up a terrific bombardment, attacked our right company front and the Imperial troops holding Fresnoy. This caught our men at a very great disadvantage as this was a new part of the line, also on account of the mist and the rain it was impossible for the artillery to see the SOS signals which were being sent up. (19th Bn War Diary, 8 May 1917)

Fresnoy-en-Gohelle, 8 May 1917

MAP KEY

- 1 3 May:** In the wake of the battle of Arras and seizure of Vimy Ridge, 1st Canadian Infantry Brigade (1st Canadian Division) storms and captures the hamlet of Fresnoy-en-Gohelle. Fresnoy, its Park and Wood are then defended by British 95th Infantry Brigade (5th Division).
- 2 Night of 7/8 May:** With Canadian forces still responsible for the front adjoining Fresnoy to the north, 4th Canadian Infantry Brigade (2nd Canadian Division) undertakes a difficult night relief of the trenches near Fresnoy Park: the 19th Bn makes contact with 12th Gloucestershire (5th Division).
- 3 0345hrs, 8 May:** Under cover of bombardment and rain, 5. K.B. Division commences its counter-attack with approximately two-thirds of its infantry strength and detachments from Sturmabteilung Nr. 6. K.B. 7. Infanterie-Regiment is first into action, but is stalled under heavy flanking fire.
- 4 0350hrs, 8 May:** The Bavarian centre and right attack. 2./KB 21. IR is the first part of K.B. 21. Infanterie-Regiment to make contact with the 19th Bn. A wedge is driven between the British and Canadian units.
- 5 0445hrs, 8 May:** Bavarian command is informed that the objectives on the right have been achieved. Fresnoy is captured and the 19th Bn is pushed back. Three-quarters of an hour later British reserves and D Coy, 19th Bn are engaged in a series of counter-attacks attempting to regain Fresnoy and the front lines.
- 6 0900hrs, 8 May:** After a fierce fight, 5. K.B. Division holds Fresnoy, though the 19th Bn regains part of its own position. Following further bombardment, the 19th Bn falls back in the afternoon, positioning itself to cover the gains made by K.B. 21. Infanterie-Regiment.

Battlefield environment

As 5. K.B. Division prepared to be unleashed upon Fresnoy the British and Canadian battalions defending it were arranged in a little salient. The men of 12th Gloucestershire had the ruins of Fresnoy village and Park in their sector, and on the right 1st East Surrey occupied what was effectively a corner, with three-and-a-half companies to the fore, and half of its D Coy behind, at Fresnoy Wood. The old German line ran to the rear along the western edge of Fresnoy Park and Wood, and a former enemy communication trench ran through the 1st East Surrey position. Further back were the positions outside Arleux, occupied by 1st Duke of Cornwall's Light Infantry. 4th Canadian Infantry Brigade was drawn up on the left of Fresnoy, with the 19th Bn next to 12th Gloucestershire. However effective this may have

appeared on a map, it was no textbook deployment, for the old German trenches were constructed to face west, not east, and there was inadequate time to re-form the new line.

One factor particularly worrying to Maj Hatch, 600yd to the rear in the Arleux Loop, was lack of communications, messages being carried by runner since lines were knocked out by shells as swiftly as they could be laid. Lamps could not be used for signalling to supporting units further in the rear due to a rise in the ground. Surviving messages, tattered and rushed, suggest the problem of contacting the forward companies was never completely resolved, though Hatch located a gun battery about 400yd behind his position with a working line that allowed better communication to the rear (19th Bn War Diary, May 1917: Appx 2, p. 21).

German postcard image showing the remains of Fresnoy, 1917. Buildings have been reduced to small heaps of rubble and shattered woodwork. The strategic importance of Fresnoy lay not in the ruins, but in the view it afforded of surrounding terrain. As Generalleutnant Nikolaus Ritter von Endres, commander of 5. K.B. Division, recalled in his personal diary, Fresnoy was overlooked by the Vimy heights, making movement in the front line impossible by day: the village itself was now just a *Trümmerhaufen* – 'a heap of rubble' (Haug 2013: 292).



	19th Bn, CEF		K.B. 7. Infanterie-Regiment
	12th Gloucestershire		K.B. 19. Infanterie-Regiment
	1st Duke of Cornwall's Light Infantry		K.B. 21. Infanterie-Regiment
	1st East Surrey		Front line of 8 May
	2nd King's Own Scottish Borderers		Old German front line



INTO COMBAT

In the small hours of 8 May the soldiers of 5. K.B. Division advanced under cover of darkness in the maximum strength allowed by space. The history of K.B. 21. Infanterie-Regiment notes that its men were in front-line trenches and shell holes by 0300hrs. I./KB 21. IR and II./KB 21. IR were either side of the Arleux–Bois Bernard road. Both battalions put two companies forward and two back, two platoons forming the frontage of each company. Yet this was no parade-ground evolution, for though 7 May had been pleasant and warm the night was cooler, with heavy rain obscuring the moon and the ground slippery underfoot. As far as possible the forward platoons formed a ‘continuous wave of shock troops’ (Reber 1929: 183).

Though the history of K.B. 21. Infanterie-Regiment lacks detail as to how its attacking waves were equipped and organized, K.B. 19. Infanterie-Regiment, deploying to its left, illustrates how this was achieved. Preparations were made in the *Wotan-Stellung*, 3km (1.9 miles) away from the point of attack, the men being equipped for action in the way ‘that experience of the Somme’ had taught. The *Törnister* (backpack) was laid aside and replaced with the *Sturmgepack* of tent-quarter, mess-tin and straps, but the bread bag was retained. The troops were issued two loaves and four days ‘iron rations’ with preserved meat and filled water bottles. Ammunition pouches were replenished and signal-pistol rounds and grenades, steel helmets, gas masks and spades added – ‘discarding of the back pack being compensated by accumulation of other equipment’ (Jäger 1930: 286). Each battalion took with it a signals officer with the intention to lay a field-telephone line for communication to the rear.

Individual attacking companies varied slightly in organization and armament, but were bolstered for the assault by detachments of *Pioniere*, elements of *Sturmabteilung* Nr. 6, platoons drawn from the battalion machine-gun companies, and other support weapons. Thus it was that 7./KB 19. IR went into action as ‘three waves of infantry’ with a platoon of 2. MG-Kompagnie and one *Lewis-Gewehr* (captured Lewis gun). They were accompanied by an *Infanterie Stoßtrupp* (infantry shock troop), a *Granatenwerfertrupp* (bomb-thrower troop) and a machine-gun troop, led by an officer of *Sturmabteilung* Nr. 6, plus a single section of *Pioniere*. 5./KB 19. IR was similarly organized but had two sections of *Pioniere* and no bomb-throwers, while 8./KB 19. IR took with it a Lewis gun and two infantry shock troops, a section of *Pioniere* and a platoon of flamethrowers. 6./KB 19. IR, behind the three attacking companies, was essentially intended as a ‘support company’ with a *Granatenwerfer* detachment and two machine-gun platoons, one of which was to be used as a flanking defence. A detachment of Reserve-Infanterie-Regiment Nr. 25 provided ‘security cover’. Specific reference was made to the presence of MG 08/15 machine guns, which, being somewhat lighter and bipod mounted, were easier to move than the old MG 08 type (Jäger 1930: 287).

At about 0330hrs the first of the assault troops left the relative safety of their holes, advanced 100m (110yd) and went prone, shortening the distance to be travelled subsequently to the British and Canadian positions. Oddly, Canadian accounts suggest that an attack of some sort was launched

at, or just before, this time, but easily seen off. Though this has been interpreted as a group of the enemy blundering into the Fresnoy defences, it is also possible the movement detected through bad weather and barrage was one of the Bavarian companies moving into position as closely as possible. The memoir of Pte Deward Barnes suggests that the men of the 19th Bn were already both vigilant and jumpy:

The whiz bangs sounded just as though they were missing the tops of our trenches, and going over the hollow trench gave them a peculiar sharp sound, besides the whiz. It made you think of home. Our Corporal told us not to be afraid, to look over, only don't move when a flare went up. The rain never stopped. The trenches were all caving in and puddles of mud and water. We were soaked through hours ago and thick with mud. We watched. We knew they were coming and fear had left me by that time. My eyes must have been half out of my head with excitement. (Quoted in Cane 2004: 79)



A Bavarian *Pionier* poses with rifle and bayonet. The bayonet is of the saw-toothed variety, intended as a tool but interpreted by the enemy as a barbaric way to inflict wounds. The Modell 1916 gas mask was advanced at the time of introduction, being compact and fitted with fresh filters by a screw-thread system. It was carried in the tin when not in use. Barnes recalled being told to fall back by an officer, and being attacked by Bavarians wearing British steel helmets. This may have been a ruse but in bombardment and bad weather, with enemy penetration to the flank and rear and units attempting to come up in support, 'friendly fire' is equally possible. Hand-to-hand combat in his first action left its impression on Pte Barnes: 'I was never so cool before. I did not bayonet any, but some did. The Germans were behind us, some killed as they were just about to get into our trenches, some sitting on top of our trenches dead, but looked alive. They were Bavarians, Germany's finest regiment and the finest men I'd seen. None looked under six feet, and big. The Bavarians were always fine, big men until the latter days of the war' (quoted in Cane 2004: 82).

Moving 150m (165yd) behind the curtain of the barrage, the first assault troops set off into the gloom at 0345hrs. Almost immediately I./KB 7. IR came under 'flanking machine gun and infantry fire and dropped to the ground', four officers being among the killed and wounded. Only by the prompt action of Leutnant Popp, commander of 4./KB 7. IR, was the situation rapidly taken in hand and the British position – 'the devil's trenches' – entered from the south. The Bavarians on the left now attempted to roll up the front line around Fresnoy village to take 1st East Surrey in 'flank and rear' (Schaidler 1922: 42–43). In the centre, the first two waves of the attacking battalions of K.B. 19. Infanterie-Regiment set off at 0350hrs through squelching 'loam and clay' behind their curtain of fire: just a minute later 'the infantry assault broke loose'. Attack under cover of dark, rain and barrage, plus counter-battery fire and numbers, gave the Bavarians the upper hand, but where Lewis guns could be brought into play the cost of success





The assault on Fresnoy



Bavarian view: This is the view from among the advancing assault troops of K.B. 21. Infanterie-Regiment at first light. The Bavarian plan depended on manoeuvring as close as possible to the ruins of Fresnoy, under cover of darkness, mist, rain and barrage before rushing a stunned defence. The foremost wave was no inflexible formation, being assembled as a 'continuous' wave using light machine guns, grenades, rifles and bayonets in combination. Wherever possible, as in the tenuous connection between the 19th Bn and 12th Gloucestershire, the Bavarians worked their way into soft spots in the line, outflanking pockets of defenders. On the left here some of the attackers

are making headway, dropping into the forward trench line where the Canadians will soon lose contact with the men of 12th Gloucestershire holding the ruins of Fresnoy. In the centre and right the Bavarians are taking casualties, and go to ground in shell holes or fall prone to return fire. Bombers attempt to throw into trenches and shell holes, paving the way for movement. The attackers are equipped with 'assault packs' rather than carrying full marching order. The idea of wrapping shelter-halves or coats around a mess tin to create a light equipment for the attack was officially promoted as early as 1915, and was commonplace later in the war.



Canadian view: Here we see the view from the front-line trench, C Coy, 19th Bn. While the Bavarian attack was well executed and ultimately successful, it was also extremely costly. On an apparently 'empty battlefield', few of the defenders were visible, and well-placed Lewis guns opened up at close range and inflicted a heavy toll, temporarily checking the attack. As is mentioned in the diary of Pte Deward Barnes, the Canadians made use of 'trench blocks' to seal off parts of the line, and when forced to do so fell back within the position. The officer wearing other ranks' uniform, foreground left, has realized that the company is being

outflanked and that the enemy are entering the trench and will soon be skirting around Fresnoy Park to their rear. Two men of the platoon Lewis-gun section prepare to defend a hastily constructed barricade with rifle and bombs. Using 'sortie steps' cut into the earth to push Lewis guns out on top behind the trenches allowed fields of fire in all directions, but was a potentially desperate measure that exposed gunners to return fire. Tenacity, local counter-attacks, and the fact that Fresnoy itself was the main target of the Bavarian attack helped the 19th Bn remain in place for as long as possible and conduct an orderly retirement despite heavy loss.

Deward Barnes

Born in Toronto in 1888, Barnes was a volunteer, first enlisting with the 180th Battalion (Sportsmen) in February 1916, a unit absorbed into the 3rd Reserve Battalion in the UK in January 1917. He saw his active service with the 2nd Canadian Entrenching Battalion and the 19th Battalion (Central Ontario). Fresnoy was his first battle, fighting as a private soldier in a Lewis-gun team. He also saw action at Hill 70 and Passchendaele, and after being promoted to corporal took part in both the retreat of spring 1918

and the final 'Hundred Days' advance at the end of the war.

By his own calculation he marched 882 miles, took part in 14 offensive and defensive actions, and spent 248 days in the front line during his service. Barnes was a big, well-built man, but repeated combat took its toll. As he observed, 'A man's nerves were never made to stand the shocks and concussions of shells, and sights and smells that go with war. I sincerely believe that the war has made me ten years older' (Cane 2004: 274).

was high. Cpl Henry Civil, C Coy, 12th Gloucestershire, later claimed credit for many of the Bavarian casualties, though the numbers mentioned appear impossibly high:

Through the dim light we saw the enemy advancing in mass formation, and immediately as No1 of my Lewis gun section, I opened fire. I kept firing and saw the Germans go down in crowds. I killed, I should estimate, at between 400 and 500. They were so thick that each bullet would go through perhaps three or four. They were in such mass formation, and so near that I could not miss them.

Someone in the rear was shouting 'go back, quick, retire' and glancing quickly round saw that I was left alone. I strained my eyes as far as I could see to my front (through the dim light I could see about 80 or 100 yards) and beyond the piles of dead could see only a few Germans running back at whom I fired off the remaining few rounds left in my pan, and replaced it with a full one (being about the sixth) and I resolved to hang on as I guessed they would come again after reassembling. It was not long before they did ... I took aim and pressed the trigger but my gun jammed after a few rounds. Bullets were hitting the ground all around me, splashing with a sting the mud into my eyes, face, ears and hands ... It was only when the foremost wave was on me that I got my gun going again. I fired at them point blank, about four or five pans until there was nothing left alive along about 150 yards of my front. (Civil 1924: 1–2)

Nikolaus Ritter von Endres

The scion of a privileged family, Endres was born in Würzburg in 1862, and joined K.B. 1. Infanterie-Regiment *König* as a volunteer in 1881. Rapidly promoted, he also saw service with K.B. 8. Infanterie-Regiment *Großherzog Friedrich II von Bayern* as a junior officer before joining the Military Academy. By the turn of the century he was on the Bavarian Army staff. During World War I his star continued to rise, first as a brigade commander, then from 1915 as a *Generalleutnant* commanding K.B. 5. Division.

His many commands in battle were accompanied by a shower of orders and decorations. These included both classes of the Iron Cross, the Military Order of Bavaria, the Order of the Red Eagle, and in 1918 the coveted Prussian *Pour le Mérite* (Blue Max). Retaking Fresnoy was his personal responsibility, success being widely lauded in the press and marked with the Knight's Cross of the Military Order of Franz Joseph. He ended the war as commander of K.B. I. Armeekorps, the rank of *General der Infanterie* being conferred in 1919.



An infantryman of K.B. 19. Infanterie-Regiment, 23-year-old Xaver Seidl of Hochfeld survived the battle at Fresnoy only to be killed by a shell the next day.

daybreak, one of the boys says, "there they are". I couldn't see them just then and finally I saw one within a stone's throw away and then dozens of them. The front line of the Germans had been skirmishing and in the distance were four lines of Germans. You could not see between them' (quoted in Cane 2004: 80).

In the confusion the two attacking battalions of K.B. 21. Infanterie-Regiment were quick to exploit what appeared to be a soft spot in the enemy line, and pushed forward into an opening gap between 12th Gloucestershire and the 19th Bn. At 0445hrs Generalleutnant Endres received the message that K.B. 21. Infanterie-Regiment had taken its objective. In the centre K.B. 19. Infanterie-Regiment was at the western edge of Fresnoy, but on the left wing K.B. 7. Infanterie-Regiment had not yet achieved the final position due to enemy machine-gun fire. The general expressed himself 'Very pleased that the scheme had worked' (Haug 2013: 292).

Opening the Canadian right flank was highly disconcerting, but by attempting to plug the gap, the 19th Bn made the best of a bad job. At 0530hrs the commanding officer signalled D Coy to send its supporting platoon forward, bombing their way along the front line to clear it to the right. Efforts were also made to use Lewis guns to sweep the intervening ground; according to Barnes,

Our Corporal placed the gun on the parados, on a high place, and opened fire behind (they had already got behind us). We had lost some of our section, so I was the next man called. I had to lay in a pool of water. I fired the gun and it jammed. Ours was the only gun that fired at all ... (Quoted in Cane 2004: 80)

Amid close-range bombing and firefights Capt Johnston's C Coy was thrown back. As the after-battle report explained: 'Our men put up a splendid fight, but not knowing their ground and being pitch dark, with a heavy mist accompanied by a light fall of rain our artillery could not see the SOS signals which were being put up'. With Johnston wounded, Lt Bridge pulled back

On the Bavarian right the attack of K.B. 21. Infanterie-Regiment struck athwart the positions of 12th Gloucestershire and the 19th Bn. Heavy fire led to immediate calls for 'SOS' fire from the British and Canadian artillery, which offered only limited support as gas had already been directed at the gunners, and the Bavarians were quickly intermingled with their foe. Pte Barnes was about to see the enemy for the first time: 'Just about

about 100yd to a trench which still had a little wire in front of it. Bridge was himself killed later, and with Lt Lawson being with the platoon attempting to support 12th Gloucestershire, command devolved to Lt Lynott. But by now K.B. 21. Infanterie-Regiment was also pushing hard against the Canadians' centre company, and the Gloucesters were in retreat (19th Bn War Diary, May 1917: Appx 2).

In the meantime the British command was attempting to launch counter-attacks into Fresnoy from the west, news conveyed to Endres in a disconcerting stream of messages including the information that 1./KB 19. IR and 3./KB 19. IR had been thrown out of Fresnoy by enemy counter-attack, and K.B. 21. Infanterie-Regiment was now steeling itself against onslaught. As Endres put it, these worrying messages 'overshadowed previous celebration' (Haug 2013: 292). Not long afterwards, however, came information that K.B. 19. Infanterie-Regiment had retaken the western side of Fresnoy and Fresnoy Park, but connection with K.B. 7. Infanterie-Regiment had failed, as apparently it was not advancing: 'Rain prevents the activity of our flyers' (Haug 2013: 292).

At this crisis of the battle, Maj Hatch ordered forward the rest of D Coy, 19th Bn: 'Support company went about their work in a most satisfactory manner, and working down the flank, captured three unwounded prisoners and killing a number of Bosches with bombs and bayonets. The enemy appeared surprised at our fast counter attack ...' (19th Bn War Diary, May 1917: Appx 2). Communication having been re-established with 12th Gloucestershire, attempts were now made to coordinate another counter-attack. News came back that being reduced to about 130 all ranks, the 'Imperials' were in no position to cooperate, however.

Not long afterwards, the Bavarians renewed their attack and connection with 12th Gloucestershire was severed again, K.B. 21. Infanterie-Regiment beginning to filter around the Canadian flank through Fresnoy Wood. This time it was the Vickers guns of the 4th Canadian Machine Gun Company that helped shore up the flank of the 19th Bn, but nothing more could be



'The recapture of the village of Fresnoy by Bavarian troops on 8 May', from an original drawing in ink by Professor Anton Hoffman of Munich, 1917. By the end of the battle 5. K.B. Division was reduced to a fighting strength of less than a regiment. According to Endres' diary, K.B. 21. Infanterie-Regiment was then organized in three 'groups' – Demmler's, 200 'rifles' strong; Nagel's, 250; and Trambauer's, just 110 – reinforced by 160 from III./IR 361 and the *Pioniere*. K.B. 19. Infanterie-Regiment was still arranged in three battalions, but the first numbered just 120 'rifles'; the second, 90; and the third, 240. K.B. 7. Infanterie-Regiment was the strongest but its first, second and third 'battalions' stood at only 180, 350 and 350 'rifles' respectively (Haug 2013: 292). Nevertheless, both contemporary reports and the Bavarian official history put a very positive gloss on the outcome: 'The 5th Bavarian Infantry Division, under the safe and clear direction of Generalleutnant von Endres, had undertaken a great blow, surprising and intimidating the enemy and leaving him with a far stronger impression than the corresponding force expended. Besides many dead, the day had cost the "English" over 400 prisoners. The 5th Bavarian Infantry Division lost 36 officers and nearly 1,500 men' (Bayerischen Kriegsarchiv 1923: 374). These losses naturally included many wounded, and a few captured, but while the assault was clearly more successful than most it remains open to question whether the objective justified the expenditure of a fresh division.

done to secure Fresnoy itself. Reports on the Bavarian side of the line were now more positive. At 0730hrs came a message that K.B. 21. Infanterie-Regiment had its objective and that K.B. 19. Infanterie-Regiment had pushed through Fresnoy to a point 50m (55yd) west. There was no news regarding K.B. 7. Infanterie-Regiment, however, and Endres was demanding connection be re-established and 10. K.B. Infanterie-Brigade give a situation report (Haug 2013: 292). After a few minutes K.B. 19. Infanterie-Regiment was able to signal back restored contact with K.B. 7. Infanterie-Regiment by means of a further advance: 'in Fresnoy over 200 "Engländer" are prisoners, and many MGs captured' (Haug 2013: 293).

By 0900hrs Endres was informing Heeresgruppe *Kronprinz Rupprecht von Bayern* that the divisional mission was complete, with the front line about 200m (220yd) west of Fresnoy. At 1015hrs 4th Canadian Infantry Brigade HQ, code name 'Cadet', signalled the 19th Bn, code name 'Carrot': 'Should Fresnoy not be retaken you may be obliged to form a defensive flank from T24d 1.5 along Alberta Road to T30a 5.1. Posts to be established as far forward as possible in the area vacated' (19th Bn War Diary, May 1917: Appx 2, p. 56). Taking his cue from this message and fearful of the consequences of being left out on a limb, Maj Hatch eventually withdrew at 1330hrs, actually putting his main body in Winnipeg Road and leaving his outposts in Alberta Road. This did not, however, prevent the German artillery from targeting the battalion. The Bavarians were left with the field:

The captured trenches were a scene of desolation. Wounded lay everywhere: these the regimental bandsmen and prisoners, acting as stretcher bearers, took back to the dressing station at Bois Bernard. Rifles, machine guns, personal equipment, coats, ground sheets and knapsacks were mixed in the mud of the trench floor. The trenches themselves were shallow and narrow, and had to be turned, deepened and widened. However, the most urgent work was to clean the dirty rifles and light machine guns, now looking like dirty lumps of wood, and to clear various stoppages in heavy MGs and bring them back into action; a difficult thing given that no dugouts, only foxholes [*Fuchslöcher*] were available. (Reber 1929: 187)

The impact on the British battalions was severe, with 12th Gloucestershire alone reporting 288 casualties, and later data suggesting a death toll of approximately 90. While the Canadians of the 19th Bn gave less ground, they too had suffered very heavily. On 9 May the battalion was reorganized on a two-company basis, A, B and C re-forming as a single company alongside the less damaged D Coy. Maj Harman reported total casualties of 11 officers and 225 other ranks 'of which the majority were killed outright with shrapnel' (19th Bn War Diary, May 1917: Appx 2, p. 22). Commonwealth War Graves actually name 78 of the 19th Bn who died between 8 and 10 May 1917, six of whom were officers. The lifeless body of Maj G.T. Denison, CO A Coy, was excavated from a collapsed dugout in Winnipeg Road showing obvious signs of shrapnel injuries to the face. Lt G.E. Cole, also believed buried, was later found wounded; he died of his injuries on 21 May. The body of Lt E.D. Zoller, who had seen two years' service with the 13th Bn and been promoted from the ranks, was not recovered.

Bellevue Spur, Passchendaele

26 October 1917

BACKGROUND TO BATTLE

The Third Battle of Ypres started with the clearance of Messines Ridge in June 1917, with the main effort commencing at the battle of Pilckem Ridge on 31 July. In official nomenclature, the attack on the now familiar blasted low hills around Ypres passed through six more separate ‘battles’ – Langemarck, Menin Road, Polygon Wood, Broodseinde, Poelcapelle and First Passchendaele – before commitment of the Canadians at Second Passchendaele, commencing on 26 October. Whether the struggle should have continued into bad weather in the face of diminishing returns remains a moot point, raised at the time by the British army commanders; but continued it was. Lt-Gen Sir Arthur Currie, promoted to command the Canadian Corps on 9 June when Byng moved to lead Third Army, expressed distinct reservations. His opinions were endorsed by various staff officers, including Lt-Col W.E. Ironside, then attached to 4th Canadian Division. Yet Currie was mollified by Haig who impressed upon him the necessity of the job, placing his corps under the umbrella of the much-respected Gen Sir Herbert Plumer, GOC Second Army, and a brief delay was admitted to complete preparations. These included repairing and extending plank and log ‘roads’ and the extension of a tramline across the mire, indispensable if artillery and heavy stores were to move, but a process hindered by shelling, particularly with gas.

Though the Germans had been gradually pushed back from their original first, second and third lines of July, further defences now faced the attackers: the *Flanders I Stellung*, part of which had been penetrated by the Australians on 4 October, and the *Flanders II Stellung*, fronting the ruins of Passchendaele. The junction of these lines lay on the Bellevue Spur about

German engineers working on a ferro-concrete bunker in the Hindenburg Line, c.1917. The concrete will be poured over the steel reinforcing rods and earth backfilled over the excavation. Some of the labour was provided by Russian prisoners of war, visible at the rear. By October 1917 the German defence was even less dependent on continuous lines than at Vimy. Not only were trenches increasingly less practical in the slime of Passchendaele, decisions had been taken to further thin out the forward zone to economize on troops. The main zone of resistance was located 500–1,000m (545–1095yd) further back. The outer crust of the forward position would now be held essentially with scattered outposts and light machine guns, mainly of the MG 08/15 variety, production of which was finally beginning to catch up with demand.

1 mile west of Passchendaele and was held by K.B. 22. Infanterie-Regiment *Fürst Wilhelm von Hohenzollern*, a regiment of huge experience commanded by Oberst Theodor Carl. Just one company occupied the outpost zone and three more the main line of resistance, the other two battalions of the regiment being in support and reserve further back. III./KB 22. IR was the forward 'battle' battalion on 26 October.

Continuous efforts were made by both British High Command and the Australians and New Zealanders to plot the dense and confusing complexes of German positions, passing reports to the Canadian Corps. As of 17 October, 3rd Canadian Division's intelligence file log for just the 'D4' square (1,000×1,000yd) of the standard 1:10,000 trench map, covering the Bellevue Spur and the ground to its north, noted no fewer than 33 individual or small groups of defences. These included seven works defined as pillboxes; 19 'dug outs', concrete or otherwise; three 'posts' with or without machine guns; two 'old battery positions'; and two 'block houses'. The same ground also contained at least four identified communication trenches; several lengths of fire trench, some very short but at least one 200yd long; and two significant and many minor fragmented belts of wire. In the ground immediately south of the Spur was the substantial 'Dad Trench', more wire, and several pillboxes inside what was effectively the wide shallow moat of the flooded Ravebeek stream. A post-battle report would reveal there were two general types of pillbox on Bellevue Spur, one square and one oblong. The former had 'entrance to the rear, and has one entrance only' (quoted in Dancocks 1986: 159–60) while the oblong variety had two entrances and two or three compartments. Garrisons varied from a few to more than 30 men, with up to five machine guns. Some pillboxes





A Bavarian Landsturm NCO with a Model 1916 *Granatenwerfer*, and a steel trench-loophole plate. *Granatenwerfer* bombs were packed ten to a crate and prepared by inserting a detonator. The range was adjusted against the scale, and direction by traversing the launcher on its base plate. The bomb was loaded onto the spigot, and discharged by a pull on the lanyard. Maximum range was approximately 325yd. As of February 1917, 24 *Granatenwerfer* were deployed per infantry regiment, in three detachments, each with two batteries of four weapons.

had loops, designed for enfilading fire, but the majority had none, relying instead on a platform to the rear from which the defenders could fire over the work, and on men spilling out to man shell holes or shoot around the corners of the bunker.

Moreover, pre-battle assessments cannot have revealed every field work, nor be certain which were manned, and they omitted the countless shell holes which, with relatively little human intervention, also became machine-gun positions. Mobile machine guns were critical to the Bavarian defence, and concrete works were intended essentially as nodes and temporary shelters from bombardment. As the Canadian official history observed,

At Passchendaele most of the German machine gun crews in the 'forefield' had their weapons in small lengths of trench sheltered from the weather by canvas or corrugated iron, and moved them to the nearest shell hole for firing; others were in circular [*sic*; either tubular or multisided] shelters of reinforced concrete, each of which could accommodate 30 men. Because the wet ground made [deep] dug-outs impossible these shelters were built above the ground ... (Nicholson 1962: 317)

Since bombardment had now removed covering earth and camouflage many were now exposed: 'From the Canadian lines dozens of these could be seen dotted across the muddy fields and on the crests of ridges. Shellfire had overturned some and caused others to tilt drunkenly, but nothing less than a direct hit from an eight inch howitzer could smash their five foot thick walls' (Nicholson 1962: 317).

For each direct hit many more shells landed nearby, causing additional cratering, and creating instant, if hugely uncomfortable, weapons pits for the German defenders. Only if the enemy could be driven from surrounding shell holes, and supporting Lewis guns be brought up, could Canadian platoons be sure of getting close enough to storm bunkers and pits with grenades.

Bellevue Spur, 26 October 1917

MAP KEY

1 13–25 October: During the lull between Entente attacks, wooden infantry and mule tracks are worked on to replace the roads destroyed or inundated.

2 20–21 October: 11. K.B. Division arrives to take over defence of the Passchendaele sector. Following First Passchendaele, involving Australian, New Zealand and British troops, the Canadian Corps is committed.

3 0540hrs, 26 October: Having formed up under cover of darkness, the Canadian main attack commences: in 9th Canadian Infantry Brigade (3rd Canadian Division), the 43rd Battalion (Cameron Highlanders of Canada) and 58th Bn are to the fore, with the 52nd Battalion (New Ontario) in support.

4 0548hrs, 26 October: On the left, the 4th Canadian Mounted Rifles (8th Canadian Infantry Brigade, 3rd Canadian Division) attacks but, suffering severely from rifle and

machine-gun fire, is held in the enemy outpost zone until resolution of the action at Bellevue.

5 0710hrs, 26 October: Lt-Col H.J. Dawson, CO 46th Battalion (South Saskatchewan) (10th Canadian Infantry Brigade, 3rd Canadian Division), reports taking Decline Copse, and digs in under fire.

6 1000hrs, 26 October: Reports from the front confirm that elements of the 43rd Bn are hanging on to the pillbox line at Bellevue.

7 1300hrs, 26 October: From this time onwards, repeated counter-attacks along 11. K.B. Division's front regain ground lost during the morning. On the Bavarian left, II./KB 13. RIR and III./KB 13. RIR contain the threat, pushing the remains of the 46th Bn from Decline Copse. At Bellevue, however, the Canadians retain their breakthrough of the main line of defence, holding against the counter-attacks of 22. K.B. Infanterie-Regiment.

Battlefield environment

The rain and mud of Passchendaele were of biblical proportions, and impressed upon the memory of those who served there for decades after the event. Even before the Canadian attack, Maj H.L. Watson of the Tank Corps would observe men 'wading' up the road, and wounded 'drowned in the mud' (quoted in Steel & Hart 2000: 272). The moral as well as physical effect on combatants was significant, and arguably weighed even heavier upon any who had to move through such a landscape than those who had to defend it.

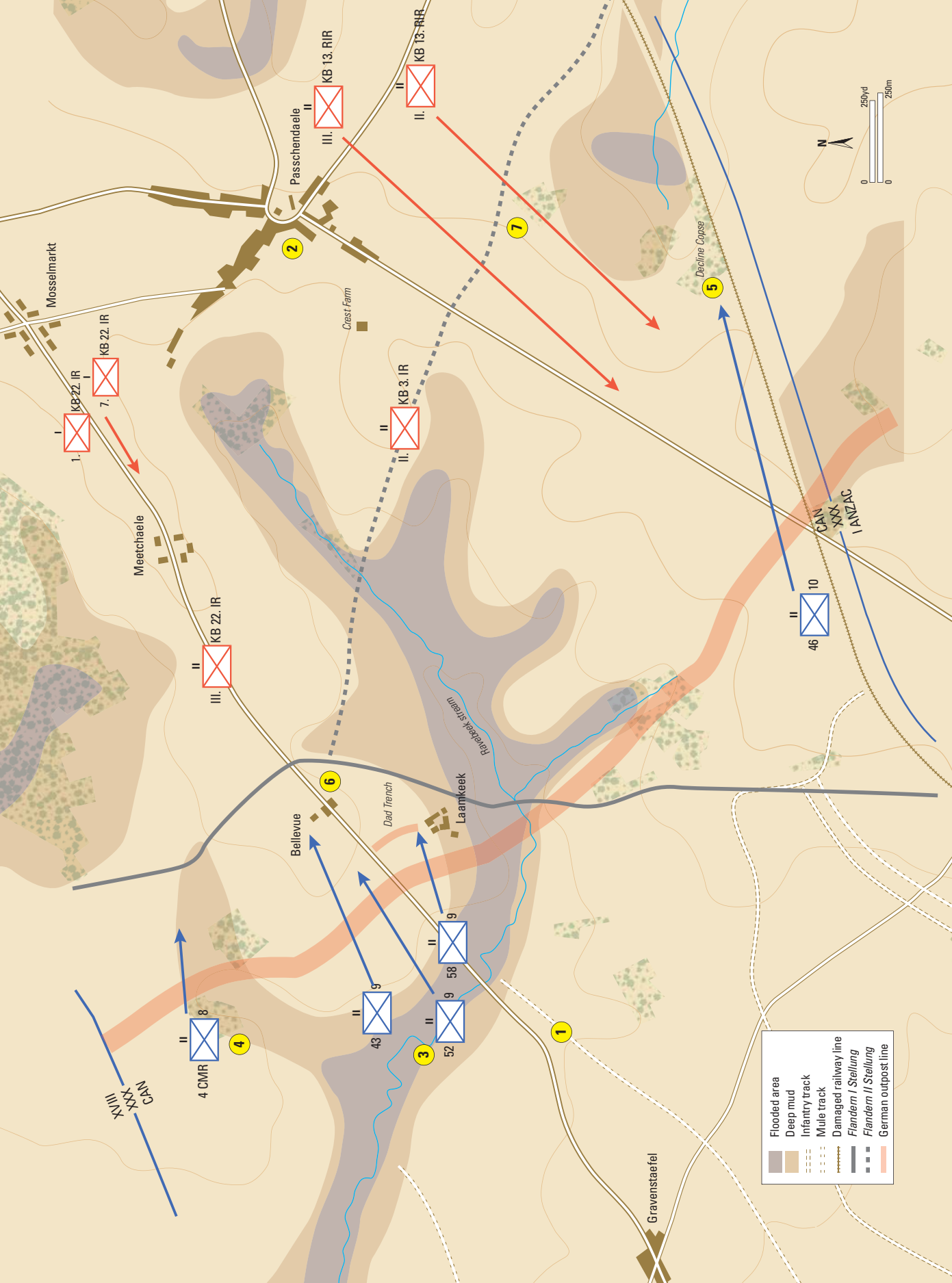
Sgt McLeod Gould of the 102nd Bn had a disorientating worm's eye view: 'It is impossible to give any adequate idea of the scenery on the way to the summit of Passchendaele Ridge. There is just a brown landscape, an interminable acreage of mud and shell holes billowing up in a gradual ascent, with depressions rather than valleys between each billow, until a flat

and desolate top is reached, on which no semblance of human habitation remains; like a map, it represents merely a number of topographic expressions. The ascent is made by means of an elaborate system of bath-mats [duckboards] which thread in every direction, whilst here and there on the hillside is seen a battery, ostrich like, unable to see the enemy but hoping that a scant shelter of brushwood is shielding it from the eyes of prying aeroplanes. Enemy planes were very active over Passchendaele and seemed to be having it all their own way' (Gould 1919: 72).

Given that conventional preliminary bombardments had no solid linear target and tended to churn the sodden battlefield, thereby impeding movement and at the same time giving away all surprise, the emphasis was now on creeping barrages and harassing fire across the front, combined with feints and concentrations on pillboxes and uncut wire.

Barbed wire, shell holes and the remnants of fortifications are still visible a year after the battle in this watercolour sketch of Bellevue Ridge by George Edmund Butler (1872–1936), an English-born war artist with the New Zealand Expeditionary Force. While the British official history admitted 'mud did greatly add to the misery and discomfort', it also claimed, 'it was not the mud, however, but the myriads of shell craters, often with water in them, which were the effective military obstacle, which prevented the infantry from keeping up to the barrage and the tanks from manoeuvring, which interfered with the supply of ammunition, and which formed a fatal handicap to the exploitation of success' (Edmonds 2009: x).





INTO COMBAT

Even moving up to the start line was a painful experience, as was related by Lt A.H. Jucksch of the 58th Bn:

It was mud-mud-mud; a sea of mud; churned and churned by shellfire; over and over again. I remember going up to what we thought were trenches and all we had to walk on was what we called a 'bath mat' [duckboard] ... On the way up I saw near this walk a hand partially sticking out of the mud and it seemed at times to be moving, so I quickly crawled and waded through the mud and discovered there was a man almost completely buried ... I scraped the mud away from him and washed his face and sent him out. (Quoted in Shackleton 2002: 173)

The assault was conducted in deep but necessarily loose formation. The 58th Bn was initially arranged on a single-company frontage, but at the jumping-off position A Coy took the right with a single-platoon front and its others distributed in depth behind; C Coy was its immediate support. On the left, D Coy was to the fore with two of its platoons forward, supported by B Coy. Just three platoons led the battalion. At zero hour the barrage commenced and the first waves followed as closely as possible, the enemy replying by dropping shells in the vicinity of the Ravebeek: this caused a few casualties to the troops assembled there, but the sheer depth of water and mud appears to have limited the effect as many projectiles submerged before exploding.

Meanwhile, it was noted that when the friendly barrage lifted in front of the attacking Canadians its advance was slower on the right than the left and was distributed over a depth of about 300yd, causing casualties to the lead platoons. Nevertheless, the 58th Bn battled on, 'subjected to heavy machine gun fire from trenches and pill boxes located at D.5.c.3.0 and D.4.d.7.3 and enfilade machine gun fire from Bellevue Farm and pill boxes to the left of the battalion frontage in the attack. Considerable machine gun fire was also directed against our assaulting formations from Crest Farm' (58th Bn War Diary, Oct 1917: 14).

Perhaps surprisingly, despite heavy losses, the 58th Bn still managed to take possession of three pillboxes at Lamkeek, and tumbled into Dad Trench. Lt Don Cameron was a platoon commander in the vanguard of the 58th Bn:

I had the platoon immediately on Pat's [Lt Edgar Patten's] right side and Mr [Lt W.A.] Moore had the platoon on his left. We got well away but almost immediately encountered heavy enemy machine gun fire from both our flanks and our men began to drop quite fast. I got a few men together and rushed the enemy strong point on the right flank, which finished them. I then noticed that our left flank was being held up by the excessive machine gun fire, and as Mr Moore was killed, I knew that Pat and I would have to go for that pill box ourselves. I ran across to Pat and found him encouraging his men as calmly and quietly as if he had been on parade ... as both our machine gun crews had all been killed or wounded, we had to go back, find the gun, dig it out of the mud, carry it up and open fire. Well, we did this but I found my gun much closer to hand than Pat found his and I had fired quite a number of rounds before I saw Pat coming

OPPOSITE

This tactical plan was replicated from a document translated and passed to the Canadians from a neighbouring corps during the battle. Accompanying notes describe how the two leading platoons of a company advance in open order as 'a matter of principle', the third platoon also doing so whenever possible. Attacking waves were instructed to gather in the front-line trenches then deploy through gaps, moving rapidly through any fire to reach the enemy trench as the friendly barrage lifted. Two light machine guns advanced with the foremost wave keeping the enemy under flanking fire, a third being available to hold a captured position. The first wave was intended to cross enemy trenches, while 'moppers up' cleared trenches and dugouts (43rd Bn War Diary, Oct 1917: 16-17).

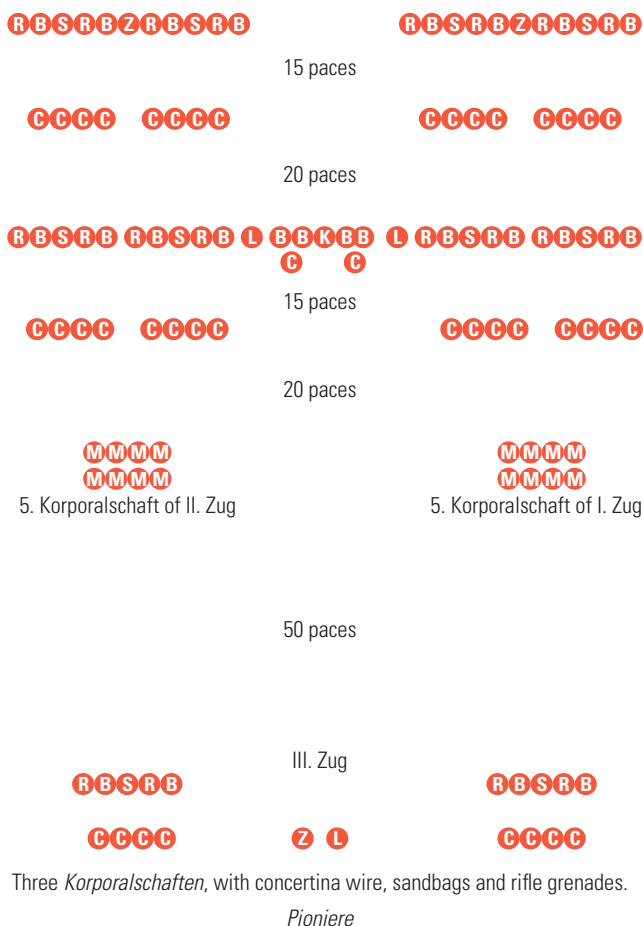
up carrying his gun on his shoulder ... As he got into position, a German sniper got him directly through the forehead. (Quoted in Shackleton 2002: 178–79)

With machine-gun fire continuing from various slightly elevated positions around it the 58th Bn had reached its limits, and the remaining men dropped into shell holes not far forward of the start line, engaging the enemy in Contour Trench with fire whenever practicable. Much would now depend on what happened on the Bellevue Spur itself.

In the ranks of the 43rd Bn the start was also less than promising. Sometime after midnight a shell had dropped on its B Coy headquarters and Maj B. Charlton was brought in wounded in the legs and hand: before being evacuated he was able to report his company sergeant major and a platoon sergeant were also hit, and command devolved to Lt F.B. Scholey. This left a corporal in charge of the support platoon. As Pte Alex Strachan of the 43rd Bn put it, 'It was really a miserable day, quite miserable. We were lying practically on the bed of the river which had been shelled all to pieces and it was just a marshy bog ... our company headquarters got blown to pieces ... before we started off ... and the battle hadn't even begun' (Archives of Canada RG41:13).

The 43rd Bn now attempted to assemble forward of the Ravebeek, in darkness and driving rain, with no way other than scouts to determine if everyone was in position: this was confirmed at 0450hrs. B Coy was now on the right, C Coy on the left and D Coy, with four Vickers guns attached, formed a second wave with orders to follow through the leading companies to the crest of Bellevue; A Coy was in the rear to consolidate. The good news was that a company of the 52nd Bn was in support, contact was established with the 58th Bn, and the covering barrage arrived on schedule. The bad news was that enemy guns opened fire on the assembled troops.

As the 43rd Bn set off the ill-fated B Coy was hit again; Lt F.B. Scholey and Lt R.J. Banks were both casualties. The entire company was soon being led by Cpl Hainstock. Soon afterwards Lt Fowler, OC C Coy, appeared at the



B Bomber	M Mopper up
C Bomb carrier	R Rifleman
K <i>Kompagnie</i> commander	S <i>Korporalschaft</i> commander
L Light machine gun	Z <i>Zug</i> commander

regimental aid post with a leg wound, bearing news that two of his officers were also down, leaving C Coy in the charge of Lt P. Borthwick as it toiled up the gentle slope. As dawn broke, Canadian soldiers could be seen on the skyline around 'two formidable pill boxes on the crest' (43rd Bn War Diary, Oct 1917: 13). More worryingly, at about 0700hrs

It became evident ... that something was wrong on the right of the brigade front as 58th Bn appeared to be held up by strong fire from a strong point on the right of the two pill boxes and this was confirmed by wounded coming in and subsequently by reports to 58th headquarters that their men were all back at their jumping off line in consequence of sniping and MG fire. (43rd Bn War Diary, Oct 1917: 13)

What was now happening on Bellevue Spur was unclear: confusingly, white flares were interpreted by 3rd Canadian Division HQ as a signal of success. The best that could be done was to send forward two companies of the 52nd Bn, and scouts with orders to locate Capt Galt of D Coy and Lt Smart of A Coy, 43rd Bn. The intention now was to use the 52nd Bn to hold the ridge, relieving pressure on the 43rd Bn. This appears to have worked to some extent, runners reporting that in fact Smart was on the ridge, with men of the 52nd Bn just behind. By 0900hrs scouts brought down a message from Lt Smart that A Coy held the ridge and pillboxes, but was now stopped about 250yd beyond. A few minutes later everything suddenly deteriorated, as was recorded by the 52nd Bn:

Just then a report from observers came in that our men were coming down the ridge to the old line forward of the stream, and this proved to be true when it was seen that some men had actually come back as far as brigade headquarters while others could be seen in the old jumping off line ... Some of the men reported that they had got an order to fall back on the old line. Here things looked very bad, and the Officer Commanding – Major [W.K.] Chandler – ordered Major Ferguson to rally the men who had come back and take them forward to the jumping off line and hold there. (52nd Bn War Diary, Oct 1917: 32)

Though not visible to the observers down near the Ravebeek, the answer to what happened is found on the other side of the line. As the history of K.B. 22. Infanterie-Regiment explains, the defenders of Bellevue experienced the Canadian attack as a series of waves. The first, led by barrage, drove through the outposts, reaching a position just 220yd west of the 'main line of resistance' suffering the 'most severe losses'. The German artillery responded by bombarding their own abandoned positions. The second thrust, half an hour later, pitted fresh troops against the left wing of the position, but was 'also rejected'; a third assault, around 1000hrs, again committed fresh 'English' troops, but was seen off with heavy loss (Mayer 1923: 84). In doing this, III./KB 22. IR was all but destroyed. As the Bavarian official history explained, it was reduced to a tattered 'remnant', which fell back, its machine guns blocked with mud and hand grenades exhausted (Bayerischen Kriegsarchiv 1923: 406).

To their left, II./KB 3. IR was more fortunate. 8./KB 3. IR, sole occupiers of the outpost zone when the 58th Bn attacked, was almost overrun.



Vizefeldwebel Leonard Abt decided discretion was the better part of valour, however, and extricated a sizeable part of his platoon and pulled back rapidly as far as the ruins of a house forward of Passchendaele. Wounded in the arm and pressed severely from three sides, he held on for ten hours, later joining an assault group moving forward again and recapturing a machine gun which had been taken in the morning. Abt was awarded the Bavarian Bravery Medal in gold; also decorated were Leutnant Melzl, and Offizierstellvertreter Schild who led repeated local counter-attacks.

The War Diary of the 52nd Bn was chillingly blunt: 'About 8:30 am the battalion was informed that the 43rd and 58th had suffered terrible casualties and had been forced to retire to their original positions ... About 9.30 am the battalion attacking force surrendered' (52nd Bn War Diary, Oct 17: 33).

This last remark is puzzling since whatever the command of the 52nd Bn may have believed, neither the 43rd Bn nor K.B. 22. Infanterie-Regiment had yet given up the fight. A little before 1000hrs, Lt Smart reported into headquarters that he had seen the 58th Bn held up, then fall back, and likewise, far out to the left, the 4th Canadian Mounted Rifles had retired. Some of his own men were now back at the jumping-off position. There was still no word from D Coy, 43rd Bn, somewhere out on the Spur. Only at

Canadian troops examine a blasted pillbox. As engineering reports confirmed, nothing but a direct hit from the very heaviest guns had much impact on reinforced concrete. In many instances bunkers were left intact, surrounded by shell holes, or were even tilted but left in one piece. Construction of concrete works in the Hindenburg Line was aided by a system of light railways.





Fight for a pillbox

In the attack on Bellevue, the 43rd Bn trudged up from the mire of the Ravebeek to seize the pillbox line from K.B. 22. Infanterie-Regiment. The Bavarians called down artillery upon their own outpost zone and began a series of local counter-attacks. The Canadians now had to hold concrete works against assault from the rear. Here, two Bavarians with grenade bags have worked their way through shell holes under covering fire. The struggle

at Bellevue was closely contested, but ultimately decided by the pair of Vickers guns brought up by the 9th Canadian Machine Gun Company and reinforcement from the 52nd Bn. The 43rd Bn was a kilted Highland battalion, complete with pipers and Tam O'Shanter's instead of Service Dress caps, but contemporary photographs show trousers or breeches worn at the front in 1917.

about 1000hrs was a clearer picture suddenly revealed when Lt R. Shankland appeared at battalion headquarters, reporting:

he was holding the ridge about 40 yards forward of the pill boxes with about 40 men including men of 9th MG company with two of their guns which were in action. He stated that provided his ammunition held out he could hold his position against any attack as he had already dispersed one counter attack that was forming up in the low ground 500 yards forward of his front. He did not know where Captain Galt his company commander was as he had last seen him during the attack attempting with five other ranks to capture a strong point on the right of the position he now held, suffering considerable annoyance from snipers half left on his frontage and also from the strong point Captain Galt had tried to capture. His men were, however, using their rifles to great effect upon isolated Germans who were seen going back ... In order to report he left the position in command of Lieutenant Ellis of 9th MG company, who, though wounded, refused to go out while his guns remained in action. (43rd Bn War Diary, Oct 1917: 14)

Flares seen by Shankland even further forward suggested some Canadians might have survived beyond his position, while an aircraft report noted friendly troops beyond the pillbox line. This craft was very likely one of the 'English fliers' K.B. 22. Infanterie-Regiment reported accompanying each attack, machine-gunning whenever the opportunity arose. It was reluctantly concluded that if any personnel of the 43rd Bn had gone to ground ahead of Shankland's position they were finished off 'by snipers' (43rd Bn War Diary, Oct 1917: 14). Nevertheless, news that there were still men holding out on the Spur galvanized 9th Canadian Infantry Brigade into renewed efforts. Lt Smart gathered the rallied men and set off again, aiming to fill the gap between Shankland's precarious position and the 58th Bn to the right. To his left was dispatched A Coy, 52nd Bn, to protect the northern flank of the Spur and establish contact with the 4th Canadian Mounted Rifles.

To respond required frantic efforts from the beleaguered Bavarians. As the history of K.B. 22 Infanterie-Regiment records, at the 'crisis of the battle ... by his own initiative, and under deadly danger, Leutnant Richard Ritter von Groh, then acting as a platoon commander, set in motion a local counter-attack' (Mayer 1923: 110). Ritter von Groh was later awarded the Bavarian Order of Max Joseph. Shankland later recalled that 50 men had advanced



over the ridge, wheeled in front of a machine gun, and were cut short by a single burst of fire.

By 1130hrs, the 52nd Bn was on the scene in strength with orders to clear the remaining pillboxes, thus relieving pressure on the 58th Bn to the right. Despite the wounding of Maj Lawless by a sniper, Lt C.P.J. O'Kelly with A Coy led his men from pillbox to pillbox throwing in grenades, and the 58th Bn, supported by D Coy, 52nd Bn, retook Dad Trench after heavy fighting. Sometime after 1300hrs, 1./KB 22. IR and 7./KB 22. IR, which had forged forward from the rear, made repeated counter-attacks. These proved largely fruitless since the Canadians now withdrew within the blockhouse line to see them off. Though Lt H.M. Grant, OC B Coy, 52nd Bn, was shot through the stomach by a sniper in the late afternoon and there was harassment from German artillery, patrols and machine guns, the Canadians hung on to their positions.

Both sides had suffered very severely, and relatively little ground had been gained. The fight was not without significance, however, since the taking of Bellevue levered open a chink in the Bavarian defence. Moreover,

German prisoners assist with carrying Canadian wounded, Passchendaele. The stretcher teams pass a working party moving duckboards in the opposite direction. The line (foreground) appears to be a communication cable: white tapes were also laid to aid navigation, particularly during attacks. (Universal History Archive / UIG via Getty Images)

horrendously expensive as they undoubtedly were, there was evidence these tactics could work. As a 9th Canadian Infantry Brigade report explained:

The general idea on which we captured nine Pill Boxes and one fortified farm on Bellevue Spur being that (in our case without any barrage) of working up by making all possible use of ground to within, where possible, rifle grenade distance of the Pill Boxes, then creating a diversion by means of showers of rifle grenades, machine gun fire, etc. under which a small party – three or four will often be enough – to get to the blind side of the Pill Box, when hand bombs are thrown in, and the whole rushed in. (Quoted in Dancocks 1986: 160)

This was not new, being a refinement of official instructions in which rifle-bomber and machine-gun sections of the platoon used their weapons to pin and discomfit the enemy while bombers crept close to attack under cover of the rifle-bombers, after which riflemen came in from a flank with fire and bayonet. The only real differences were that on 26 October the Canadians put greater stress on a stealthy approach, preferring to risk as few bombers as possible: very sensible given the German defence was thinly spread and a network of points. Such methods were similar to those used by the enemy.

According to 11. K.B. Division, K.B. 22. Infanterie-Regiment lost 114 confirmed killed on 26 October, but this was only part of the story as 271 were wounded and a further 311 missing, presumably prisoners or dead. Three officers died on the field of battle: Kirschock, Engert, and Klinger of 3. MG-Kompagnie. Leutnant Emmeler was carried away wounded by the Canadians, but reported dead by a British field hospital a month later. To the immediate left, K.B. 3. Infanterie-Regiment *Prinz Karl von Bayern* fared slightly better, but still counted 406 losses, half of these wounded, the remainder killed or missing (Sheldon 2007: 259). The price paid by the Canadians was almost as great: Commonwealth War Graves show the 43rd Bn lost 104 killed or died of wounds that day, while the 58th Bn had 93 killed. The 52nd Bn, striking when the Bavarians had been heavily battered, fared better, with 14 dead, five dying the next day. To the fatalities were added about 400 wounded.

In terms of prisoners, the balance sheet favoured the Canadians. About 60 men of K.B. 22. Infanterie-Regiment were captured in the pillbox line during the first actions, and another 200 were brought in later. The next day, the 52nd Bn totted up its captives, counting 275 including nine officers on hand. Likewise, 21 machine guns were claimed, but of these only five were brought out owing to the terrible nature of the ground and the extreme exhaustion of the Canadians. In addition to Canadian casualties, D Coy, 52nd Bn carried back four wounded Germans on stretchers, under shell fire, and two more officers of the battalion were wounded. Signal communications were disrupted and the enemy again harassed the Canadians with machine-gun and sniper fire. The first round of Canadian attack at Passchendaele had ended. O’Kelly and Shankland both received the Victoria Cross. Though the Bavarian official history was dismissive, Bellevue was a bloody if partial success at a crucial point surrounded by failure. To seize Passchendaele itself would take another two weeks.

Analysis

The infantry soldier of 1917 saw but little of the big picture – but much of the trauma of battle:

... time plays strange tricks. Men, looking back and through their civilian years, found that incidents they had thought etched on their minds forever, came back vaguely, distorted, and differently to them than to any other. No two men recalled things exactly the same; and small wonder, for seldom things were seen the same, as all old soldiers know. Battalions in attack knew little of what went on beyond their own boundaries and the limit of the individual's vision was often but a few yards. Now and then there were stark impressions – little things burned deep where all else was welter. A comrade twisting, shattered and broken, to the shell spouting earth, was often the one indelible and clear memory of a battle that changed history. Dead-cluttered gully and pummelled ridge, trench angle and road direction, night routes and up-the-line trench-ways, were clouded in the roar and stress and chaos. (Beattie 1932: viii)



A contemporary artist's impression of the 'Capture of an English machine gun by a German shock troop'. In reality, charging a machine gun head-on *en masse* was least likely to lead to a successful outcome. By mid-1917, both sides had developed more sophisticated tactics, including bringing machine guns under fire from light machine guns, working troops around flanks and bombers moving from shell hole to shell hole.

Unsurprisingly, Canadian morale dipped in the wake of Passchendaele, but ultimately it would recover. Eyewitnesses of 1917 took away with them many different impressions of infantry combat, but our brief study tends to confirm two important and long-established conclusions about the Canadian battalions. First, they were different from British battalions; second, they were their equals or better in combat prowess. As Robert Graves observed as early as 1916, 1st Canadian Division was 'dependable of all occasions' (quoted in Griffith 1994: 80). Paddy Griffith was just one of several modern commentators to regard Canadian infantry divisions as 'elite' (Griffith 1994: 81).

We should not, however, overemphasize the difference with British troops for a number of reasons. The first was that many 'Canadian' soldiers were born in Britain, and often considered themselves citizens of Empire first, and Canadians second. Another significant factor was that while raised in a different way, Canadian troops received much of their training in the UK, using British methods, uniforms and equipment. They then fought alongside 'Imperial' troops, the enemy rarely referring to them as anything but British or English. Nevertheless, Canadian – like Australian and New Zealand – divisions were essentially self-contained, not shuffled around into other formations, and so managed to maintain a distinct identity. They were also limited to just four front-line divisions, recruited to full strength whenever possible, and as a result were often stronger than their British equivalents. Finally, if less obviously, Canadian recruitment was entirely voluntary until 1917. The British press was highly supportive and encouraging of the Canadian soldier. An image of positive, competent, stoic British troops was repeated, magnified even, when it came to discussion of a 'cheerful' Canadian contribution.

Conversely, we should be aware that compared to Britain, relatively few Canadian conscripts made it to the European battlefields. The verdict of the War Office on Canadian recruitment, published in 1922, was that 'Those born in the United Kingdom have quite done their share ... [but] Of Canadian born – British extraction – a large number were still available ... The large reservoir – Canadian born, French extraction – made practically no contribution to our Army' (War Office 1922: 380). Statistically, 24 per cent of the male population of England enlisted, against 18 per cent of the Canadian 'white male population' born either in Canada or the UK. Simply put, the Canadian soldier on the battlefield was almost always of an identifiable Canadian formation, more likely to be a volunteer, better paid, and taken from a more select group.

The Bavarian picture was very different. The war, portrayed by the press as defensive or at worst pre-emptive, unified citizens of the German Empire more effectively than peace. Bavarian and Prussian recruitment methods were similar, and conscription covered all of Germany from the outset, even if it was not administered with absolute impartiality over all classes and professions. As the war progressed, state distinctions became less obvious. The decisions of the Bavarian War Ministry tended to become exercises in rubber-stamping of Imperial edicts, and equipment and uniform ever more similar in the interests of economy and efficiency. Under pressure of war, state rivalries were expressed as competition against a common enemy, or buried through censorship. Strategic expediency led to mixing of divisions, even battalions, and made less obvious the idea of a 'Royal Bavarian Army'. Nevertheless, at regimental level



Canadian NCOs of the 3rd Battalion (Toronto Regiment) fooling dangerously with trophies including a German Luger P 08 (left) and Mauser C 96. Created mainly from the Queen's Own Rifles of Canada, Royal Grenadiers and Governor General's Bodyguard, the 3rd Bn maintained strong British connections. These included a band that played a 'composite air' of the 'March of the Buffs', 'British Grenadiers' and 'Men of Harlech'.

Bavarian identity remained strong, and depots in Bavaria continued to provide replacements. Popular news reports still referred fondly to 'Erlanger boys' or the 'Nurembergers' even when regimental designations were suppressed for security.

Tactically, much had changed since 1914: indeed, quite a lot had changed even since the summer of 1916. The continuing significance of artillery on the infantry battle, particularly in 'set piece' actions, should not be underestimated, and there were notable improvements. In the week ending 2 July 1916 about 2.4 million British shells were fired on the Western Front; in the week ending 15 April 1917 the figure was over 2.7 million. Moreover, many problems with filling and reliability were solved. The real difference, however, was in the types of shells, and how they were fired. In 1916 a slight majority of munitions were shrapnel shells, but at the opening of operations at Arras the proportion was 3:2 in favour of high explosive. More of these shells were heavy: the number of 6in howitzer rounds used doubled. Effectiveness was further improved by better fuses: the new 106 type in particular burst the shell on contact with any object. The result was bursts in wire, clearing obstacles better than explosions under them, and bursts on the surface of the ground were more deadly than shells which were buried and caused deep craters obstructive to the advance. Creeping barrages moving ahead of infantry existed in 1916, but were now perfected, mixing shrapnel, high explosive and smoke to deal with enemy troops on and under the ground, and conceal movement. It was accepted that large quantities of shells could be used to 'neutralize' the enemy, rather than just to destroy him and his works. On the other side the Germans made similar progress, not least with sudden short bombardments, and in manufacture, where the Hindenburg programme now prioritized artillery and munitions (Farndale 1986: 158; Griffith 1994: 135–58).

Aftermath

In Canada the war on the Western Front in 1917 sparked a 'Conscription Crisis', and, perhaps perversely, vocal opposition from French Canadians whose own mother country was now on the brink of defeat. Retrospectively, however, the 'spirit of Vimy' proved to be a step change in consolidating Canadian identity. Dominions were recognized as autonomous nations of an 'Imperial Commonwealth', and in 1919 Canada joined the League of Nations independently of Britain.

For Bavaria the results were otherwise. Attrition, defeat and peace impacted one after another on the psyche of the Bavarian soldier. Supplies dwindled and the quality of recruits dipped even if battlefield resolve was very slow to erode. While the chances of a Bavarian soldier enjoying home leave were greater, loss and hardship fell proportionately more heavily than in Canada, and desire for an end to the fighting grew. War weariness, catastrophic losses and defeat led to socialist revolution. The fall of the Kaiser and the feeling that the Army and populace had been misled by rosy predictions of victory would unravel the Empire through both external military pressure and internal civil disobedience. Ludwig III, King of Bavaria, went into exile, ending the 700-year primacy of the Wittelsbach dynasty, and Kurt Eisner declared Bavaria a 'free state'. Ottawa celebrated the otherwise dour 1930s with legislative independence from the UK; Munich became recognized as *Hauptstadt der Bewegung*, capital of the National Socialist movement, within a Nazi Germany.

Though it was difficult to appreciate amid attritional battles that might cost attacking infantry battalions more than half their strength when the wounded, missing and prisoners were added to the dead, the Western Front campaigns of 1917 took a significant step towards the elusive ideal of 'open warfare'. The developing technologies of artillery and tanks were obvious, but infantry also made significant improvements. Attacking at night, occupying forward zones with minimal garrisons, and making imaginative use of strongpoints and web defences were part of the story, as was the managing of the counter-attack and



FAR LEFT

'French Canadians, enlist! Our first line of defence is in France'. In the French-speaking community, voluntary recruiting proved unsuccessful. Supported by Prime Minister Sir Robert Borden, conscription was introduced in late 1917 triggering divisive debate, and unrest in Quebec City in early 1918. Unlike in the British Expeditionary Force, conscripts never formed a major element of the Canadian Expeditionary Force.

LEFT

'Help us win! Sign War Bonds'. This iconic image by artist and designer Fritz Ehrler (1868–1940) of Munich used on posters and postcards supported the successful sixth War Bond drive of 1917. This determined-looking figure carries both gas mask and grenade bag with 1916-type stick bombs, caps removed and pull cords exposed ready for quick use.

setting realistic targets for advances. Movement within positions increased. Equally important developments occurred at micro-level, where Lewis guns and the MG 08/15 became mobile fire supports of platoons and even squads. Rigid formations were abandoned, battalions often deployed in depth rather than breadth, and 'shock action' became a staple of the infantryman's craft.

The Germans, including the Bavarians, may have led in this respect, but the British and specifically the Canadians, were not far behind. 'Stormtroop' ideas did not appear like magic in 1918, but were already well on their way to fruition by late 1917. A Canadian report on Bellevue stressed avoiding obvious lines of approach, the role of grenades in attacking pillboxes and that in training men, 'extended order work and section rushes with objectives for each platoon and section should be practised' (52nd Bn War Diary, Oct 1917: 3). All this still led to pathetically small territorial advances, and since both sides were improving their game in terms of attack and defence, losses increased rather than diminished. Morale-raising over-optimism in 1917 came to sound hypocritically hollow in the aftermath of war. Bavarian senior commanders could, however, understand why these infantry actions were fought, and the last word is perhaps best left to General der Infanterie Hermann von Kuhl, Chief of Staff, Heeresgruppe *Kronprinz Rupprecht von Bayern*:

It would be quite wrong to deny the British credit for the courage with which they fought and for the obstinate way they brushed aside the heaviest casualties and kept renewing their assaults. It would be equally wrong to suggest that there was any possibility they might have broken through. The fact that, despite this, they continued their offensive was justified by the British on the basis of the overall situation. After the total collapse of the Russian offensive in July, the Russian army as a fighting force had fallen completely out of the picture. The Italian front was in complete tatters in October. Above all the hitting power of the French, after the failure of the offensives on the Aisne and in Champagne, followed by the mutinies and internal disturbances was so greatly reduced that they urgently needed relief. The United States was still not in a position to do anything. (Quoted in Sheldon 2007: 315)

UNIT ORGANIZATIONS

Canadian infantry battalion

The pre-war Canadian Militia had been organized on a system of eight companies to the battalion, but with deployment to Europe the battalions of the CEF were re-formed on a four-company basis, matching the organization of the British battalions. Unlike their British counterparts, however, Canadian battalions were numbered individually, not usually as a series within a regiment, and as soon as practicable were deployed in Canadian divisions of what became the Canadian Corps.

The commanding officer of a battalion of 1,007 all ranks was usually a lieutenant-colonel, the company commanders being majors or captains. Companies, notionally 221 men and six officers, comprised four platoons, each led by a lieutenant or second lieutenant, and each platoon was comprised of four 12-man sections, typically under a corporal. The four companies of the battalion were usually lettered A–D, and the basic infantry weapon was the bolt-action rifle, by 1917 the Short

Magazine Lee-Enfield. Lewis guns were issued 16 per battalion by the beginning of 1917, rising to 32 in 1918. Vickers machine guns were manned by the companies of the Canadian Machine Gun Corps but sometimes allotted, usually in pairs, for close support of the infantry. Stokes mortars were similarly attached, and approximately a quarter of the riflemen were equipped with rifle grenades.

Reduced battlefield ‘trench strength’ was partly a result of casualties and men being required for detached duties, but for big operations a proportion of the troops, especially key specialists and officers, were ‘left out of battle’ to assure continuity of command. According to regulations of December 1916 the number of officers allowed in an attack was 20 per battalion and could not include both the commanding officer and second-in-command. While rules were sometimes bent, battalion battle strength in 1917 was usually in the region of 650–750 all ranks.

Bavarian infantry battalion

As with the rest of the Imperial German Army, Bavaria’s infantry regiments were each organized in three battalions, numbered ‘I’, ‘II’ and ‘III’. In 1914 divisions were organized with four regiments, two regiments to each brigade, but in 1915 it was decided to create ‘triangular’ divisions of three regiments, and under the new arrangement there was only

one infantry brigade of nine battalions in each division.

Nevertheless, reorganization was progressive, and even at the beginning of 1917 some still retained larger establishments.

Battalions were divided into four numbered companies, with companies 1–4 comprising the first battalion of the regiment, 5–8 the second and 9–12 the third. Battalion

Bavarian supply troops pose in fatigue uniforms with kitchen equipment and beer mugs. Motor transport expanded considerably during the war, but remained less important than rail and horsed movement. Reliance on the horse reduced battlefield mobility, particularly in Western Front conditions, and especially impacted German forces. Note the crowned blue-and-white Bavarian coat of arms on the vehicle side.



commanders were usually *Major* in rank, company commanders *Oberleutnant* or *Leutnant*. Companies were divided into three *Züge* or platoons. Each *Zug* contained four *Korporalschaften* and it is interesting to note that Royal Bavarian units commonly used the term *Korporal* rather than *Unteroffizier* for NCOs at this command level. Each *Korporalschaft* comprised two *Gruppen*, with each *Gruppe* or squad numbering eight men and a *Gefreiter*. The basic weapon of the Bavarian infantryman was the bolt-action rifle, usually a Gewehr 98.

Within battalions, numbers of men were reduced but numbers of specialist weapons, particularly machine guns, increased as the war progressed. So it was that the original 1,080 all ranks, organized into four infantry

companies per battalion, plus one machine-gun company per regiment, had metamorphosed into 750 men per battalion, each with four infantry companies, plus three machine-gun companies per regiment, by March 1917. Four light *Minenwerfer* and eight *Granatenwerfer* per battalion, and two MG 08/15 light machine guns per company were also added. It was to this level that 5. K.B. Division was replenished before its commitment at Fresnoy. During 1917 front-line combat strength of battalions dipped further to about 650. Discounting staff and supporting elements, a notional front-line company combat strength of about 120 (or 480 per battalion) was assumed at Passchendaele. Issuance of the MG 08/15 light machine gun now reached four per company, however.

ORDERS OF BATTLE

Vimy Ridge, 9 April 1917

2nd Canadian Infantry Brigade (Brig-Gen F.O.W. Loomis)

Attacking waves:

10th Battalion (Canadians), CEF

7th Battalion (1st British Columbia), CEF

5th Battalion (Western Cavalry), CEF (dismounted)

Support:

8th Battalion (90th Winnipeg Rifles), CEF

2nd Canadian Light Trench Mortar Battery

Divisional assets included four brigades of Canadian field artillery, five brigades of Royal Field Artillery, four engineer units, four trench-mortar batteries and four machine-gun companies (working across two brigade fronts).

Elements of 1. K.B. Reserve-Division (Generalmajor von Pechmann)

First line, Loën-Süd:

2./KB 3. RIR; 3./KB 3. RIR

Second line, Loën-Süd:

1./KB 3. RIR; 4./KB 3. RIR

First and second lines, Wittelsbach-Nord:

10./KB 1. RIR; 11./KB 1. RIR

Third line, Wittelsbach-Nord:

12./KB 1. RIR

Dispersed in the *Zwischen-Stellung* and strongpoints:

9./KB 1. RIR

Supporting artillery on divisional front:

K.B. 13. Artillerie-Kommandeur, K.B. 1. Reserve-Artillerie-Regiment

Fresnoy-en-Gohelle, 8 May 1917

Empire forces at Fresnoy

4th Canadian Infantry Brigade (Brig-Gen R. Rennie):

19th Battalion (Central Ontario), CEF

Elements of 18th Battalion (Western Ontario), CEF

Elements of 20th Battalion (Central Ontario), CEF

13th Infantry Brigade (Brig-Gen L.O.W. Jones):

Elements of 2nd Battalion, The King's Own Scottish Borderers

95th Infantry Brigade (Brig-Gen Lord E.C.

Gordon-Lennox):

1st Battalion, The East Surrey Regiment

12th (Service) Battalion (Bristol), The Gloucestershire Regiment

1st Battalion, The Duke of Cornwall's Light Infantry

Artillery support was given in response to 'SOS' signals.

K.B. 5. Division (Generalleutnant Nikokaus Ritter von Endres)

K.B. 7. Infanterie-Regiment *Prinz Leopold* (three battalions)

K.B. 19. Infanterie-Regiment *König Viktor Emanuel III von Italien* (three battalions)

K.B. 21. Infanterie-Regiment *Großherzog Friedrich Franz IV von Mecklenburg-Schwerin* (three battalions)

K.B. 10. and 13. Pionier-Kompagnien

Elements of Sturmbataillon Nr. 6

Divisional assets included a squadron of light cavalry, K.B.

5. *Minenwerfer-Kompagnie*, a field-artillery regiment and a battalion of heavy artillery, reinforced by guns from adjoining units, totalling over 40 batteries.

Bellevue Spur, 26 October 1917

Canadian forces

Left of Bellevue:

4th Canadian Mounted Rifles (dismounted)

Bellevue:

43rd Battalion (Cameron Highlanders of Canada), CEF

58th Battalion, CEF

52nd Battalion (New Ontario), CEF (in support)

Right of Bellevue:

46th Battalion (South Saskatchewan), CEF

44th Battalion (Manitoba), CEF (in support)

47th Battalion (British Columbia), CEF (in support)

Supporting artillery included 306 field artillery pieces, plus

227 heavy and medium guns and howitzers, across the two divisional fronts, though about one third of the guns were inoperative due to the conditions.

Elements of K.B. 11. Division (Generalmajor Paul Ritter von Kneußl)

K.B. 3. Infanterie-Regiment *Prinz Karl von Bayern*

K.B. 22. Infanterie-Regiment *Fürst Wilhelm von Hohenzollern*

K.B. 13. Reserve-Infanterie-Regiment

Two *Pionier-Kompagnien*

Of nine infantry battalions, only three companies occupied the outpost zones and nine companies the main positions. Two battalions and other companies were brought forward for counter-attack. Supporting artillery included one field-artillery regiment and K.B. 11. Minenwerfer-Kompagnie.

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A hand-coloured portrait of a Bavarian NCO in field uniform. Like the rest of Imperial Germany, Bavaria adopted field-grey service uniform shortly before the war. Note the collar *Litzen* of a senior regiment, and the *Bayerische Hoheits-Borte* – chequered collar lace worn by Bavarian NCOs.

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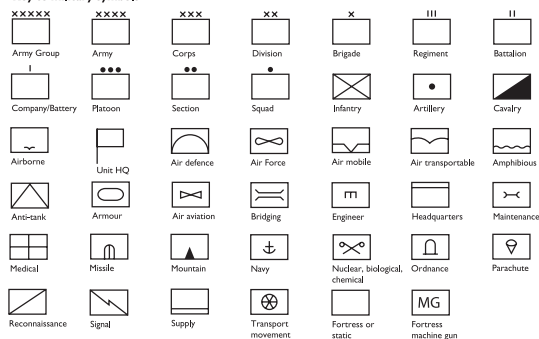
Editor's note

Unless otherwise noted all photographs are from the author's collection. The titles of Canadian infantry battalions are given in full on first mention, and abbreviated thereafter, e.g. '1st Bn'. The names of Bavarian units and formations are given in German; these are shown in full at regimental level and higher, with battalions and companies being abbreviated. Bavarian infantry battalions were given roman numerals, so 'I./KB 1. IR' denotes I. Battalion of K.B. 1. Infanterie-Regiment. Bavarian infantry companies were given Arabic numerals and were numbered consecutively within the regiment, so '8./KB 1. IR' denotes 8. Kompagnie, K.B. 1. Infanterie-Regiment.

Comparative infantry ranks

Canadian	Canadian abbreviation	Bavarian
colonel	Col	<i>Oberst</i>
lieutenant-colonel	Lt-Col	<i>Oberstleutnant</i>
major	Maj	<i>Major</i>
captain	Capt	<i>Hauptmann</i>
lieutenant	Lt	<i>Oberleutnant</i>
2nd lieutenant	2/Lt	<i>Leutnant</i>
no equivalent ('sergeant-major lieutenant')		<i>Feldwebelleutnant</i>
no equivalent ('deputy officer')		<i>Offizierstellvertreter</i>
regimental sergeant-major	RSM	<i>Etatmäßige Feldwebel</i>
company sergeant-major	CSM	<i>Feldwebel</i>
no equivalent ('junior company sergeant-major')		<i>Vizefeldwebel</i>
no equivalent ('ensign')		<i>Fähnrich</i>
sergeant	Sgt	<i>Sergeant</i>
corporal	Cpl	<i>Korporal</i>
lance corporal	L/Cpl	<i>Gefreiter</i>
private	Pte	<i>Soldat/Musketier/Reservist</i> , etc.

Key to military symbols



Key to unit identification

